VOL. XXX, NO. 4 • AUTUMN, OCTOBER 1949

THE
PERSONALIST

An International Review of Philosophy, Religion, and Literature

EDITORIAL BOARD
RALPH TYLER FLEWELLING, Founder and Editor

ASSOCIATE EDITORS
D. S. Robinson, Current Thought; Merritt M. Thompson, Foreign Exchanges; Review Editors: Wilbur Long, Herbert L. Searles, B. A. G. Fuller, Paul R. Helsel, Sterling M. McMurrin, Louis Wann, Garland Greever, A. Th. Polyzoides, Floyd H. Ross, D. H. Rhoades, Frederick Mayer, Lionel Stevenson

ADVISORY EDITORS
Edgar S. Brightman, Walter G. Muelder, Boston University; William Pepperell Montague, Columbia University; Gordon W. Allport, Harvard University; Richard Hope, University of Pittsburgh; William van Wyck, University of California; José A. Franquiz, West Virginia Wesleyan University; Robinson Jeffers, Carmel; N. Lossky, New Haven; Vincent Y. Shih, University of Washington; C. J. Ducasse, Brown University

FOREIGN ADVISORY EDITORS
Andres Avelino, University of Santo Domingo; Charles Baudouin, Geneva; Gaston Berger, University of Marseille et Aix; Etienne Gilson, College de France; Eduardo Garcia Maynez, National University of Mexico; Emmanuel Mounier, Editor, *Esprit*, Paris; Manuel Regueiro, Universidad Nacional de Litoral, Argentina; Francisco Romero, Buenos Aires; Roderick Scott, Fukien Christian University, China; C. C. Hahn, Ewha College, Seoul, Korea

Published Quarterly by
THE SCHOOL OF PHILOSOPHY
UNIVERSITY OF SOUTHERN CALIFORNIA
Los Angeles, California
Printed at THE WARD RITCHIE PRESS

Copyright, R. T. FLEWELLING, 1949 Registered U.S. Patent Office
Entered as second-class matter July 8, 1938, at P.O. at L. A.
under act of March 8, 1879.

Address orders to
FLORENCE H. SMITH, Circulation Secretary
3518 University Ave., Los Angeles 7, Calif.

SINGLE COPIES 50 CENTS : YEARLY SUBSCRIPTION $2.00

Our Contributors' Page

Victorianism in Science by the *Editor* discusses the startling revolution that has taken place in scientific theory which in his opinion will cause readjustment of ideas in every department of life. He wonders how long it will take the run-of-the-mill teacher of science to acquaint his students with the implications of these newest discoveries which are friendly to spiritual interpretations of reality.

Director Daniel S. Robinson who writes on *Ethical Crisis of the Atomic Age* contrasts the contradictory principles of Eastern and Western culture as represented by Radhakrishnan and Dewey and pleads for a common ground of action. He cannot see that social science apart from a spiritualistic outlook can solve the present crisis. This essay was read before the recent Philosophy Forum of the University of Southern California.

The Ult-atom and the Person by *Edward Le Roy Moore* of World Peace Research casts into the form of Platonic dialogue definitions of matter and reality as they would appear in conversation between teacher and student. It should suggest answers that are much needed at the present.

A life of political interest and public service climaxed by two terms as Governor of Colorado neither dulled his sensibilities of natural beauty nor his appreciation of a sister state. So we are able to present former *Governor Vivian's* tribute to *California Poppies.*

James Street Fulton, author of *Science and the Naturalization of Man*, after teaching experience at McGill University and Yale is now Associate Professor of Philosophy at Rice Institute of Houston, Texas.

Dr. F. C. S. Schiller was a great letter writer. His letters of acceptance to the University of Southern California are of interest but more particularly so are references to William James in earlier correspondence which is found in these *Letters* left in the hands of the Editor after Schiller's death.

Professor Ghyka, who teaches at Mary Washington College, has made it a sacred duty to keep up with the advances in science. His review of three important books, Strömberg's *The Searchers*, Whittaker's *The Beginning and the End of the World*, and Ruyer's *Elements de Psycho-Biologie* under the title *The New Biology* is important for its up-to-dateness.

Contributions to *The Personalist* do not necessarily express the sentiments of the Editors. In the interest of freedom of discussion views dissident from those of personalism are welcomed if strongly written. Manuscripts unaccompanied by postage will not be returned.

THE PERSONALIST

VOLUME XXX, NO. 4 AUTUMN, OCTOBER 1949

Contents

ARTICLES PAGE

I. Victorianism in Science. *The Editor* 341

II. The Ethical Crisis of the Atomic Age. *Daniel S. Robinson* . . . 348

III. The Ult-atom and the Person. *Edward Le Roy Moore* 357

IV. Verse: California Poppies. *John C. Vivian* 375

V. Science and the Naturalization of Man. *James Street Fulton* . . 376

VI. A Group of F. C. S. Schiller Letters 385

VII. The New Biology. *Matila Ghyka* 393

Notes and Discussions 403

Along the Bookshelf 404

The New Look in Science and the Old

The Road to Reason: *Du Noüy.* Organic Form: *Holmes.* Biosynthesis: *Mott.* Whitehead's Philosophy of Time: *Hammerschmidt.* The New Science of Vico: *Bergin* and *Fisch*, Trs.

Ideas and History

The Basis and Structure of Knowledge: *Werkmeister.* Essays in the History of Ideas: *Lovejoy.* The Meaning of Human History: *Cohen.* The Abuse of Learning: *Lilge.* Philosophy of Life: *Chen Li-Fu.* The Tyranny of Time: *Allen.*

Interpretations of Religion

Ancient Egyptian Religion: *Frankfort.* Philo, Foundations of Religious Philosophy: *Wolfson.* The Shaking of the Foundations: *Tillich.* A Commentary on the Holy Bible: *Dummelow*, Ed. Christian Paths to Self-Acceptance: *Bonthius.* Church Union: Why Not?: *Scotford.* A Call to What is Vital: *Jones.* A Greater Generation: *Ligon.* *Intuition et Religion, le Problème Existentialiste*: *Ortegat.* Powers of the Soul: *Pomeroy.* John Hales of Eton: *Elson.* *Amour et Pureté*: *Du Teil.* Hegel's Early Theological Writings: *Knox* and *Kroner*, Trs.

In the World of Literature and Art

Essays on Shakespeare and Other Elizabethans: *Brooke.* Doctor Faustus: *Mann.* Four Thousand Years of China's Art: *Carter.* Chance and Symbol: *Hertz.* The Nations in the Mediaeval Universities: *Kibre.* The Cyprus Passion Cycle: *Mahr.* Browning's Essay on Chatterton: *Smalley*, Ed.

Western Civilization

Chapters in Western Civilization: *Staff of Columbia College.* The Spirit of Revolution in 1789: *Rogers.* The Coming of the French Revolution: *Lefebvre.* Father Knickerbocker Rebels: *Wertenbaker.* The Steep Places: *Angell.* The Family, Its Function and Destiny: *Anshen*, Ed.

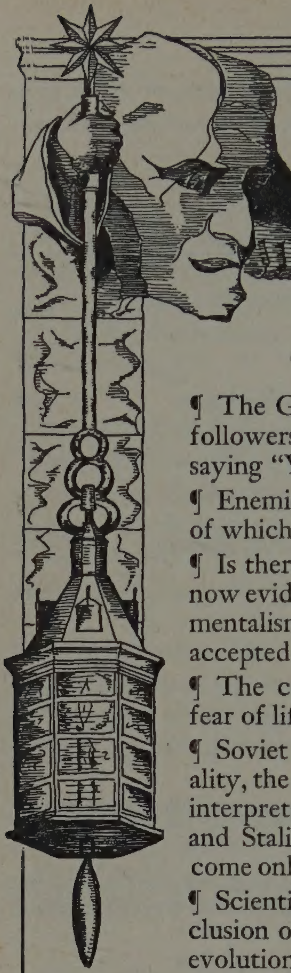
The Book Abroad

Philosophie de l'Etre*: *Raeymaeker.* The Psychology of Imagination: *Sartre.* *Psychanalyse et Connaissance*: *Dubal.

Our Contributors' Page 338

The Lantern of Diogenes "Strange Bedfellows" 340

Books Received 445



THE LANTERN OF DIOGENES

"STRANGE BEDFELLOWS"

¶ The Great Teacher rebuked the prayer of His followers to call down fire on their opponents, saying "Ye know not what spirit ye are of."

¶ Enemies often work from a common principle of which they are unaware.

¶ Is there more perfect illustration of this than is now evident in political Marxism, religious Fundamentalism, and the obsolete science still popularly accepted and taught?

¶ The common denominator of all three is the fear of life.

¶ Soviet dogma rests on a materialistic view of reality, the nonexistence of spirit, after an "infallible" interpretation of Darwin as given by Marx, Lenin and Stalin. Yet the social benefits they seek can come only through the existence of spiritual values.

¶ Scientific dogma is analogous save for the inclusion of the last three names. But the theory of evolution cannot be sustained without the appearance of life, unexplainable as a redistribution of identical atoms.

¶ Dogmatic religion also rests on presumed infallible interpretation by fallible men of what was at first a living revelation and must in the very nature of religion continue so.

¶ Each of these standpoints is self-defeating, totalitarian, hostile to new ideas, distrustful of freedom.

¶ Two astonishing repercussions from this situation have come in the past year from the Kierkegaardian gardens beside the Atlantic (and in the "Atlantic") in a proposal to substitute for an obsolete religion what is recognized by advanced scientists as an obsolete science. More recently "Uncle Joe" publicly denounced his outstanding philosopher as being "suspected of metaphysics."

¶ Crowding into this same narrow bed is a motley host of witch-hunters and restrainers of opinion.

¶ What strange bedfellows are made by the fear of the living! R. T. F.

Victorianism in Science

BY

THE EDITOR

A WELL-KNOWN SCIENTIST recently referred to a common attitude among scientists as an example of "Victorianism." If Victorianism is to be construed as in the dictionary, "narrow in opinion and expression" in the preservation of outmoded ideas, this term, often used of conventional moralism, may be held as reasonably applicable to certain dogmatisms that pass in current science as the most assured facts. This is a strange, though not unique, situation in a discipline which claims to be the most progressive of all, and is a fact worth looking into.

The Scientific Revolution

If we consider science merely from the standpoint of its technical uses, with no mind for the implications, social, moral or philosophical, it is quite possible to continue repeating ancient scientific dogmas that have been long abandoned. This was supposed to be the peculiar theological trick which kept the dogmas, presumably, by keeping the phrase and changing the meaning. Thus it preserved an appearance of changelessness while it accommodated itself to new interpretations. Though the connotation changed utterly, the form of words survived to convince the elect that they were thoroughly orthodox. This, by the way, is the only basis on which a literal orthodoxy can be maintained. In a similar manner, many present-day teachers of science continue the repetition of outworn and discarded theories with "the full assurance of faith," and then give these to uncritical and callow youth as indubitable and up-to-date facts.

That such a state of affairs could arise is due in part to the habit of overspecialization in which one branch of science has made itself incapable, by the creation of technical lingo, to speak the language of a sister science, and, in part, a studied contempt for philosophy which has removed from many scientists the will, or even the capacity, for logical criticism. Most revolutions begin unnoticed and are far advanced before "they break into the open" of general recognition. Among these earliest scientific movements was the discovery by Pasteur of the dissymmetry of living cells and the function of the microbe in vital existence, and this a century ago. Then came the great electronic discoveries connected with radioactivity which made untenable the materialistic concept of inert matter. These discoveries, and others, precipitated the principle of relativity as an effort to overcome apparent incongruities and yield a single world from multiplying paradoxes.

The second law of thermodynamics which indicated a process of deterioration of physical energy, irreversible, played havoc with the theory of indestructibility so essential to the dogma of materialism, the eternity of matter. This dogma continues to be taught, at the very moment that the law of entropy is resorted to in order to determine the age of the earth by determining the amount of energy it has *lost.* Among those scientists who still hold to a belated materialism, the law is still discussed as if it were some vague Absolute Idea like that of Plato, hanging in the air which can be considered something or nothing according to whim.

The atom driven to its lair, appears to possess neither "lair" nor even particularity, being without substance in the materialistic sense, and only a center of force, an active energy, a "construct of mind," an "event in a space-time continuum." This means that physical reality is as mysterious as the relation between a man's will and his physical activity, a mystery which behavioristic psychology can solve only by assuming that the Cosmos itself is some huge God Dagon with a nervous system corresponding to our own. Late advances in genetics only add to the general rout of materialism, which is openly disclaimed by our leading scientists,* while it continues to

*For a partial list of these scientists see p. 407 of this issue.

be fed to high school and even college classes as incontestable fact. The transformation of species, if the new genetics is to hold, occurs not as a gradual advance due to hereditary changes but rather as a purposed event taking place in the genes or chromosomes of an original cell where future characteristics, previsions for environment and function, are laid down in advance of the existence of the organism. This astounding discovery with its necessary implications is slurred over by the "Victorian" by applying to his more advanced colleague the opprobious epithet "vitalist" and then dismissing him by innuendo without argument.

These various discoveries show the hollowness of any claims for the truth of a materialistic interpretation of Darwin and compel a reintegration of evolutionary theory. The theory which must now displace the older one will give room for spiritualistic interpretations, the presence of a Creative Intelligence, and, for this very reason if no other, will be rejected by the "Victorians." It becomes apparent that evolution cannot be separated from an original life-principle. Instead of an inertial world, alike in all its parts, we are forced to accept one which abounds everywhere in energy, movement, dissymmetry and change. The one essential to an evolutionary process is seen to be the existence of a power capable of overcoming the second law of thermodynamics, and this existence is discoverable only in life which proceeds from life. Life alone possesses the stirrings of immortality. Only the living can add to the energy of the dying world. Many will refuse to see it, but see it or not, this fact transfers reality from the dead to the living, from inert matter to a purposive Creative Intelligence. Such is the import of the recent revolution in scientific thought.

The Revolution Demands New Interpretations

For long years after the revolution in China which displaced the regime of the aged Empress Hsu Tsi, men could be seen walking about her cities wearing the long cue which was the acknowledgment of Manchu sovereignty. It was said that these people were so absorbed in the "specialization" of making a living that they were still unaware of the passing of Manchu despotism. We now have an analogous case in the Empire of Science.

Materialism is based on the assumption of a primary reality which is nothing but inert matter moved only from without. Every particle is assumed to be like every other particle, ultimately, and change is seen as only a redistribution, redistribution by chance alone. It would be puerile to mention this but for the fact that this sort of "science" is still commonly taught. As a matter of fact, any divergence from this teaching is outlawed in Russia and deprecated by "Victorians" elsewhere. Our belated scientific colleagues will howl at the suggestion of any relationship to the Soviet view of science that sets up Darwin, Marx, Lenin and Stalin as the fountainheads of advanced scientific thought, but there is a relationship, let the chips fall where they may. The suggestion would be no more welcome to Soviet "scientists," for the only way they will acknowledge Darwin is by the assertion that his system was their own, and long previous, invention. The common basis is, of course, materialism, and arises from the demand for oversimplification. Western culture has from the beginning been dogged by a flair for Oriental monism, for materialistic monism is but a counterpart to the spiritualistic monism of the East, the all-or-nothing demand so often encountered. This monism is, however, in direct opposition to that which has made possible Western progress. Because it is human to seek undisturbed and undisturbable conclusions, science, religion and philosophy have, at various times in the West, fallen under the spell of this effort for oversimplification. As spiritual monism relieved its devotee from responsibility for all but the salvation of himself, and stagnated him in personal rapture, so the retreat to scientific monism, an inertial and equalitarian material reality, relieved the materialistic monist from concern for a spiritual destiny for which many were glad, and also presented him a front against clerical interference. Philosophy and theology emphasized the separation by an Absolute Idealism which took the opposite pole. While both held some measure of truth, it was clear that neither by itself could hold the solution of human existence. In the case of science the tendency was to belittle or deny moral values by refusing reality to spiritual qualities. In religion it led to a do-nothingism, the enjoyment of spiritual illusion divorced from life. The result has been a deadlock with opposing parties ignoring or glaring at each other, while the world is neither all matter nor all spirit, but a combination of the two which calls for the actual spiritualization of matter on the part of man: the emergence of the spiritual butterfly from its more material cocoon. In this sense, evolution is the triumph of spirit over matter.

The scientific revolution which ascribes reality to energy, force, activity, events occurring in space-time, cannot overlook the chief participant in the construction of reality, namely, the factor which transcends the reality of the passing moment, now here, now gone, and which because of its unique transcendence of time is able to ascribe meaning to a world otherwise uninterpretable. The law of change erects every entity into a new creation with every change, except for those beings that can gather the vanished past, its present and its possible future into a unity of meaning. Without the presence of such a personality, human or Divine, there could be no reality. The world is either personal or it is nonexistent. Each man's reality is the mental construct of his own experiences and its foundation must rest eventually in a Creative Personal Mind which lends reality to the whole.

VICTORIANISM IN CONTEMPORARY SCIENCE

The man on the street has a right to expect to find in the teachings of science, last of all, a paradoxical adherence to obsolete dogmatisms accompanied by claims for progressiveness. One wonders how long it will be before the teachers and textbooks of science rectify what, at present, is misinformation. This timidity of men of science to break moorings with the past is paralleled in religion by a nervous revamping of Kierkegaardian Judaic theology in a desperate effort "to save the faith once delivered," and at the same time to remain blind to the revolutionary character of the teaching of the Hebrew prophets and the Christian Gospels. The question which faces this chaotic and faithless age is the one that faced Mary at the Tomb: "Why seek ye the living among the dead?" Every age must discover for itself both its science and its God if it is to be effective. On any other basis both science and religion are merely hearsay, tradition without living meaning. If there is a living God, his revelation must be up to the minute and if there is to be a living science, it cannot be trammeled by outworn clichés of the past.

On the verge of new eras, the common backward look befuddles the minds of a chaotic age. The anomalous fact of our era is that "Victorian" science, fundamentalistic religion, fighting each other, and common foes of Marxism, all three draw from the same theoretical sources, being monistic, authoritarian, dogmatic, and totalitarian in certain basic assumptions. They have a common lack in different ways. The Marxian falls short through the dismissal of moral and spiritual qualities as nugatory and illusive. He hopes to build a world of common justice by a denial of justice to all but those of his own opinion, a world of freedom by the forceful enslavement of all dissidents. The ends he seeks are dependent upon moral and spiritual realities which he denies, and his physical progress upon a freedom of thought in science which he outlaws. The fundamentalist in religion substitutes for a faith in living revelation, a belief in dogmas of the past of whose living meaning he is unaware until he makes them his own discoveries. A like mood besets the "Victorianist" in science. He is so wedded to hypotheses that were once valuable to progress that he refuses to acknowledge their obsoleteness and the possibility of facts that assist a spiritual conclusion. Denying the mysticism connected with religion he has become enmeshed in a mysticism of his own, the nature of which he conceals from himself by a form of words. Empires of presumed facts are based on mere constructs of language, atoms, particles, molecules, fields, synapses, and networks, which he asserts but cannot define: a science of verbiage and clichés which he proceeds to treat as physical existences until some new discovery calls a different tune. Along with a "know-nothing" modesty in his own field in which he confesses that he cannot tell what an atom is, but only what it does, as Du Noüy pointed out, there goes a positive assertiveness outside his field, of the nonexistence of spiritual reality because of its mysticism.

ONE WORLD

No saying of the hour is more trite than the saying that we live in one world. It is one world only in the physical sense that means of communication, the conquest of space have reduced us to a single neighborhood. In this sense there is but one small world, but there is little unity. The mere juxtaposition which we now endure, uniting us physically, may even more violently divide us in mind and spirit. Physical unity may be a menace if there is no spiritual harmony. Gifts are necessarily diverse. There can be no single pattern of belief or opinion among living men. Perfect community of ideas would be unmistakable evidence of death. There are no arguments in the graveyard, but peace there is gained at a price. Achievement of one opinion by force or compulsion means death for the compulsionists more surely than for those they would compel. The only relief from such a situation lies in the tolerance of differences. We can tolerate differences if we are convinced by a living faith in a Divine leadership that embraces all men in a common love. But we must do much more than "tolerate" people. We must learn the living genius of Western progress that differences of opinion are themselves the sources of progress. As dissymmetry in atomic substance is the source of energy, and dissymmetry in the cell the necessary concomitant of life, so dissymmetry of social and political thinking are the growing pains of a united world. That civilization is bound to be richest which can harmoniously include and profit by the widest diversities. This principle holds everywhere: in science, in religion, in philosophy, as well as in social and political organization. One-party governments are suicidal. The question of the hour is how we may arise above this chaotic situation and find peaceful solutions, true unity, a real One World. It can come only by a general rising to the life of the spirit which many deprecate and which others love to assume is nonexistent.

The Ethical Crisis of the Atomic Age

BY

DANIEL S. ROBINSON

In this article it is my hope and intention to present and clarify a new idea rather than merely expound and revivify an old doctrine. But I must remind you of the wise saying of Dr. F. C. S. Schiller, who wrote:

> The first hundred times or so that a new idea is ventilated, it is simply disregarded, and treated as though it had never been; the one hundred and first time, when some forceful genius gets the world by the long ears and makes it listen, the learned can always say that it was anticipated long ago.[1]

While it is true that this new idea I wish to present has not yet been ventilated the one hundred and first time, I am well aware of the fact that it has long been in the making, and perhaps the best way to introduce it is to indicate briefly its historical setting, or at least to explain its source so far as my own thinking is concerned.

It was my privilege to attend the Sixth International Congress of Philosophy at Harvard University in 1926. The program committee arranged for two distinguished philosophers, one representing Western culture and the other Indian culture, to discuss at one of the plenary sessions the subject "The Role of Philosophy in the History of Civilization." Professor John Dewey gave one of his most brilliant and original addresses in which he forcefully presented from his instrumentalist and pragmatic point of view the idea that the essential role of philosophy is to function as a mediator between the old and the new elements in a culture. However, any impartial critic will recognize that in stating this unique function of philosophy he was

[1] See *The Personalist,* Vol. VIII, p. 82.

friendlier to the new than he was to the old. Professor S. Radhakrishnan argued that the basic role of philosophy is to reveal to each generation the eternal meaning of the culture which it received from its ancestors, and to conserve the durable values of that culture for posterity.

Later I selected these two distinguished addresses for inclusion in my *Anthology of Recent Philosophy*, which was widely used as a textbook for courses in contemporary philosophy. I have read each of them many times and discussed them with students. They set in sharp opposition two conceptions of human culture. John Dewey's theory is that civilization is a never-ending creative process, guided by reflective thinking, that grows and grows from generation to generation and ever achieves higher and higher levels of integration. Radhakrishnan's theory is that civilization is the concrete revelation in human history of an eternal spirit intelligently at work producing cultural values, whose creativity successive generations share but which no living generation can ever control. It would be difficult to exaggerate the extent to which these two conceptions have been in opposition to each other in recent interpretations of human civilized society.

For example, in a new book containing lectures delivered at the University of Washington in the spring of 1945, Professor George A. Lundberg,[2] of the Department of Sociology, raises the question "Can science save us?" He argues persuasively that the confusion of our time is due to the fact that the development of a unified social science has lagged behind the advances made in the physical sciences. He condemns all forms of "idea propagation without scientific knowledge of how to achieve concrete goals" as being pure sophistry. He pleads for grants for social science research comparable to those made for research in engineering and in the physical sciences. He contrasts the fruitful labors of social scientists who have the know-how to achieve their goals, and professional social idealists who are unable to distinguish between ideals and illusions. He quotes John Dewey to prove that there is a cleavage in our culture because we have applied science in the physical world but have signally failed to apply it in the realm

[2] *Can Science Save Us?* Longmans, Green and Co., N. Y.

of society, a cleavage which Dewey said "marks every phase and aspect of modern life: religious, economic, political, legal, and even artistic." And then he adopts Dewey's proposed solution of the problem—namely, the development of a unified method of attack and procedure. Lundberg draws this rather astounding conclusion: "This unified method of attack must be that of modern natural science applied fully to human society including man's thoughts, feelings, and 'spiritual' characteristics."[8] Throughout his book this author makes it clear that he thinks the solution of all the problems with which modern men are confronted is to be found in a rigorous application to all human relations of the experimental method so successfully employed in the physical sciences. Conversely, he believes that the evils that beset modern men are primarily due to the survival of traditional ways of thinking, and traditional unscientific methods of dealing with social problems.

Before proceeding with a detailed statement of the opposite goal it is important to comment critically on Lundberg's theory that science alone can save us. Quite recently the most progressive social scientists have come to recognize that the experimental method so successfully employed in the physical and biological sciences does not constitute a satisfactory method for the social sciences, and they are now deeply concerned over a crisis within the social sciences which arises from the fact that no common conception of what modern man should become can be found among social scientists. Although this is not the ethical crisis I am attempting to make clear, it is closely related to it, and it is so extremely significant that I feel constrained to turn aside from my major aim to quote the late eminent German philosopher Dr. Ernst Cassirer's clear statement of this crisis. He writes:

> . . . our modern theory of man lost its intellectual center. We acquired instead a complete anarchy of thought. Even in the former times to be sure there was a great discrepancy of opinions and theories relating to this problem. But there remained at least a general orientation, a frame of reference, to

---

[8] *Ibid.*, p. 13.

> which all individual differences might be referred. Metaphysics, theology, mathematics, and biology successively assumed the guidance for thought on the problem of man and determined the line of investigation. The real crisis of this problem manifested itself when such a central power capable of directing all individual efforts ceased to exist. The paramount importance of the problem was still felt in all the different branches of knowledge and inquiry. But an established authority to which one might appeal no longer existed. Theologians, scientists, politicians, sociologists, biologists, psychologists, ethnologists, economists all approached the problem from their own viewpoints. To combine or unify all these particular aspects and perspectives was impossible. And even within the special fields there was no generally accepted scientific principle. The personal factor became more and more prevalent, and the temperament of the individual writer tended to play a decisive role. *Trahit sua quemque voluptas:* every author seems in the last count to be led by his own conception and evaluation of human life. That this antagonism of ideas is not merely a grave theoretical problem but an imminent threat to the whole extent of our ethical and cultural life admits of no doubt.[4]

Oviously Lundberg begs this whole question by simply assuming that there is agreement among social scientists as to what human nature is and what kind of social organization will best meet human needs. How can science save us when the social scientists are not in agreement on what our salvation means?

I turn now to a statement of the other major ethical goal of the atomic age. In his most recently published lectures, which were originally delivered in the Universities of Calcutta and Benares in the winter of 1942, and are entitled *Religion and Society,*[5] Radhakrishnan restates his life-long conviction that it is an exaggerated emphasis upon science that has created what he calls "a vast convulsion of society as a whole." He attacks nationalism and argues that secularism is the chief weakness of our age. He asks this question:

---

[4] Ernst Cassirer, *Essay on Man,* pp. 21f. Yale University Press. A thesis similar to that of Professor Lundberg is defended by L. L. Whyte in *The Next Development in Man,* New York, 1948.

[5] The Macmillan Company, New York, 1947.

> Are human beings to be understood in terms of biology, politics or economics, or are we to take into account their family and social life, love of tradition and place, love of religious hopes and consolations whose history goes back far beyond the oldest civilization?[6]

This is a rhetorical question the answer to which is obvious. But here it is.

> We must discover our roots in the eternal and regain faith in the transcendent truth which will order life, discipline discordant elements, and bring unity and purpose into it.[7]

Even more specific is this comment.

> From the beginning of recorded history, Hinduism has borne witness to the sacred flame of spirit which must remain forever, even while dynasties crash and empires tumble into ruins. It alone can give our civilization a soul, and men and women a principle to live by.[8]

And so he concludes:

> The mystic religion of India which affirms that things spiritual are personal, and that we have to reflect them in our lives, which requires us to withdraw from the world's concerns to find the real, and return to the world of history with renewed energy and certitude, which is at once spiritual and social, is likely to be the religion of the new world which will draw men to a common center over across the national frontiers.[9]

Is it an error to regard this as another and an opposite astounding conclusion to that of Lundberg? The American social scientist demands the complete eradication from the modern world of traditional social patterns and ancient techniques and insists that science and only science can save us. The Hindu philosopher castigates our blind reliance upon human technological science and recommends the antique mystical philosophy of the Hindu Upanishads as the solution of our modern problems.

---

[6] *Ibid.*, p. 21.

[7] *Ibid.*, p. 24.

[8] *Ibid.*, p. 43.

[9] *Loco citato*, p. 497. Compare with Radhakrishnan the two brief books by T. S. Eliot entitled *Notes Towards the Definition of Culture*, New York, 1948, and *The Idea of a Christian Society*, New York, 1948.

Perhaps in these two statements I have gone too far. It should be especially emphasized that both Lundberg and Radhakrishnan are tolerant and liberal enough to give some recognition to the opposite position. For example, Lundberg freely admits that there are traditional values which should be conserved when he stresses the importance of including the classics as an essential part of the curriculum of higher education. And Radhakrishnan quite willingly admits that modern science has made many significant contributions to culture. All that can be truthfully said is that each of these thinkers strictly subordinates one of these ethical goals to the other, while recognizing that there are some values implied in the goal he subordinates. So long as this is done the real ethical crisis need not arise, since it is quite probable that the advocates of one of these views will about equal in number and ability the advocates of the other. This is the healthy condition that should exist in a genuinely tolerant and liberal society. On this point I believe all real philosophers would agree.

Now it is precisely this balance between the two opposing ideals that has been upset completely by the development of powerful totalitarian regimes whose avowed purpose is to remold and reconstruct the whole of a given society according to a definite social, economic, and political program. These regimes set out deliberately to destroy or remake by force all traditional institutions – family, state, educational, economic, and cultural. Their leaders proclaim the necessity of a completely scientifically ordered society without even considering its effects on existing institutions which are primarily designed and are actually functioning to conserve traditional values. When these venerable institutions are thus openly attacked those who believe in them and who cherish the values they mediate are aroused, and soon they begin to blame science, and technological developments for undermining their influence. In this way the two opposed ideas of the ethical goal for the atomic age have become or are in process of becoming abstract and doctrinaire ideological weapons.

As such they each embody arbitrary assumptions, each defends itself against the other with propaganda which includes lies, deceits, and misrepresentations with respect to their own exclusive value as well as with respect to the asserted falsity and viciousness of the opposite ideology. This means that two apparently opposed ethical goals, which a liberal social philosophy might conceivably bring into a synthetic unity, have become rigidly fixed dogmas that are utterly irreconcilable. It is not thinking that has done this, it is the result of irrational activities of fanatical leaders who willingly blind their eyes to the value of the opposite goal, and lead their emotionally activated followers in a human stampede not unlike that of Zane Grey's thundering herd of buffaloes stampeding on the western plains.

This explains what I mean by the ethical crisis of the atomic age. Let me now restate it in a summary, to make clear the stages through which it has evolved. It begins with the conflict between two apparently opposite conceptions of what the ethical goal of the atomic age is. One of these conceptions is the remaking of civilized society and all of its institutions. This means an unlimited application of scientific knowledge to the building of a new economic, political, and spiritual community of modern men. The other concept of the ethical goal of the atomic age is the need of men to use their hidden energies to conserve and to perpetuate into the future all that is good in the existing institutions of civilized society. I maintain that an ethical goal can be stated which will include both of these moral purposes, and I intend to formulate that goal presently, after I complete this summary. One group of the intelligentsia in contemporary society has interpreted wrongly the goal of remaking the world by application of scientific knowledge to mean the complete destruction of age-old institutions that have successfully transmitted traditional cultural values from generation to generation. These are the contemporary iconoclasts who seek to build a new and scientifically planned society to replace what they regard as a set of inherited and unplanned social institutions. These iconoclasts are so blinded by their own zeal and fanaticism that they are ready to destroy every existing institution and start *de novo*. Another group of hard-boiled conservatives are convinced that the only hope of mankind is to return to an agrarian economy, with commodity money, so that the good old days when men were all so happy and so poor may be restored. These fundamentalists and neo-humanists wish to set back the clocks of history to the eighth, ninth, and tenth, and later centuries, and restore a supposedly idyllic benevolent clericalism or theocratic society such as John Calvin had in Geneva and certain of the benevolent popes had in the papal states. They despise scientific knowledge and charge the ills from which society now suffers to the domination of science over religion. Each of these groups of intellectuals is completely biased with respect to the value of the goal they defend, and also with respect to the assumed disvalue of the goal they attack. In consequence an ideological spiritual and cultural warfare is being waged to the bitter end with neither group of protagonists willing to give an inch to the other. This is the ethical crisis of the atomic age, and if it is not squarely met and overcome, our liberal democratic society is in danger of being destroyed completely.

In reformulating the ethical goal of the atomic age to avoid this ideological development, let me begin by agreeing fully with Professor Dewey that one of the primary functions of philosophy is to create a *modus vivendi* for the living generations of educated people within which both the values now being and later to be created are merged with the durable values that have been transmitted to us by earlier generations. It must surely be obvious to any reflecting mind that the true ethical goal for people of the atomic age is the conservation and the enhancement of all cultural values of all the peoples of the earth, since this is the concrete meaning of the conception—the common good of all mankind. This is the rational, philosophical and intelligent way to deal with the opposition between the advocates of the conservation of traditional cultural values and the advocates of the enhancement of civilization by continually adding new discoveries and inventions to enrich the common good. This is the way in which the distinctive strain and stress between these supposed opposites should be removed and transmuted by a clear formulation of an ethical goal which includes both sets of recognized values. It is our misfortune that we live in an age dominated by irrational forces the manipulators of which are fundamentally opposed to a rational solution of this opposition, but who seek by every possible means to accentuate and intensify this opposition until it erupts into a worldwide social revolution.

May I also add that a purely temporalistic and historical interpretation of man's moral purpose is always in danger of becoming either a doctrinaire type of dogmatism like Karl Marx's dialectical economic materialism, or of degenerating into complete skepticism and relativism.

Hence, without sharing his enthusiasm for the Hindu form of religious mysticism, I am in full agreement with Professor Radhakrishnan's emphasis upon the fact that there is a definite link between man in his historical and terrestrial existence and the eternal spiritual world in which he also lives, and moves, and has his being. Never in human history did men more need to view the transitory events which make up their daily existence—*sub specie aeternitatis*—from the viewpoint of eternity, than they do today. It is precisely at this point that John Dewey has led many of his disciples astray.

The Ult-atom and the Person

A Modern Socratic Dialogue

BY

EDWARD LE ROY MOORE

The Student:

I am convinced that the mystical speculations which picture an elaborate other world inhabited by shadowy ghosts, are all based on nothing but the flimsiest guesses and superstitious fears. If these speculations are not true, then to believe them is an evil that hinders the progress of sound knowledge and absorbs much energy that should be turned toward putting forward the truth. It must be that man is neither soul nor body, neither mind nor matter, but some unified reality different from both.

The Professor:

The concept of matter has been very serviceable and so also has the concept of mind. Let us not reject them. Only let us be careful not to make any unwarranted speculations regarding their separation.

The Student:

Mind can never be separated from a material body, but surely matter can be separated from mind.

The Professor:

Upon first thought it seems that matter can exist utterly independent of consciousness. It seems that in experience, bodies come into consciousness and then go out of it. A comet enters the range of our telescopes and passes out again. It is still real although beyond our ken, and, so far as we know, beyond the ken of all other conscious beings.

THE STUDENT:

Can matter exist forever, utterly beyond the reach of all consciousness?

THE PROFESSOR:

If a certain thing did so exist that it could never have any, not even the least influence on man, then it would not be real to man. The real is that which has an influence on us. The real is an object of our thought, it occupies our consciousness. It can be real to us only as we become aware of it and act toward it. Whatever can come within our consciousness is real (unless it may be called "imaginary") and is an object of knowledge. Nothing could be real which was so unrelated to us that it could never become an object of our knowledge, our consciousness.

THE STUDENT:

There must be many things out in the infinite stretches of space that can never have an influence on me at all.

THE PROFESSOR:

Then, of course, you would have no knowledge of them. To you those "many things" would be forever nothing. If they never can enter your environment, they are to you absolutely nothing; they belong in another universe, and between that other universe and you there is an impassable gulf. But such things to you at least are absolutely unreal, they do not exist. Therefore, the only "many things" you can speak of are in direct relation to you; they are yours and you are theirs. All that is real is continuous with our consciousness. All matter, all the universe is in touch with our thought.

THE STUDENT:

But matter must have existed before man appeared upon the earth.

How could it have been continuous with our consciousness a billion years ago?

THE PROFESSOR:

When we apply tense to the totality of existence by saying that matter existed before man and will exist after man, we are using both the concept of matter and the category of time out of their proper spheres. Locke showed that although color seems to exist in the objects we look at, it really does not exist at all aside from our perception of it. A color is a sensation and when no sensory being is seeing it, it does not exist. Berkeley and Hume followed Locke and went even further, while Kant in his *Critique of Pure Reason* showed that space and time and other categories of the understanding are, in this respect, like color. That is to say, space and time do not exist aside from thought.

THE STUDENT:

Are they unreal?

THE PROFESSOR:

Space and time are real, just as color is real, because we are aware of color and space and time. But we have no right to speak of color aside from our awareness of it. And in like manner, we have no right to speak of space and time as existing aside from our awareness of them.

We are aware of physical things. All the physical things that we know about we have learned about through our eyes, our ears, and other senses. They seem to us to have color, sound, taste, hardness, and other qualities. When we come to reflect upon these qualities we understand that without exception they all depend upon our five senses. We *feel* that the *things* have all the qualities but we would never know of the qualities nor of the things themselves except through our senses.

THE STUDENT:

Surely the things do not depend for their existence upon any man's awareness of them.

THE PROFESSOR:

After we have reflected about the nature of the things, we understand that they have color and other qualities only through our awareness. Einstein tells us that time is only another dimension of space, a fourth dimension. Now we know that in our ordinary thinking, time is quite different from the three dimensions of space.

The physicists tell us that light is undulant and that sound is another kind of wave. But we know that light and sound to us are not alike and neither color nor sound reminds us of waves. It is obvious that Einstein is talking about time and space, and the physicists are talking about color and sound, in some sense different from our ordinary awareness of them.

The scientist honors "facts," the experiences grounded in our five senses. His theories "are strictly subjected to these facts." His efforts are directed toward enlarging these experiences grounded in our senses. But the scientist does not pretend to do more than enlarge our ordinary awareness. When he states any theories he is not talking about something which exists independently of our thinking. We are aware of things through color, sounds and so on. We know nothing of these things except what our senses tell us. But the color is in our eye, not in the things—the sound is in our ear—the space and time are also in our awareness.

THE STUDENT:

But we are certain in our hearts that the things are not merely subjective illusions—hallucinations. We are certain that they have a reality in themselves aside from anything we know about them.

THE PROFESSOR:

Quite true. But if we say that color does not exist in the things aside from our feeling of color, then we must say also that time does not exist in the things aside from our feeling of time.

THE STUDENT:

Is matter totally unreal?

THE PROFESSOR:

"Matter" is only the name of the "stuff" of the "things" which have color, sound, hardness, weight, bulk, and so on. Matter is as real as the "things" are, but its reality depends upon our inner feelings just as color's reality does. To say that matter existed before man appeared upon the earth, is true for our awareness but it can have no meaning aside from our consciousness of it because matter and time, past, present, and future are real only in our consciousness.

THE STUDENT:

What is the connection between matter and mind?

THE PROFESSOR:

Every speck of matter and every human mind are welded together into one piece. We find ourselves endowed with five senses. We can see, hear, touch, taste, and smell. When we do any of these five things we say that we perceive. Our perceptions, the pictures that present themselves to us, are all made out of fragments that reach us through these five doors. But in making these pictures we have to make an order out of the fragments. The order we make is a space-and-time order.

We are aware of space as the spread-outness of our perceptions.

When perceptions of whiteness and roundness and hardness and smoothness and heaviness persist in coming from the same space we may call the sum total of these perceptions a white marble.

We are aware of time as the motion of objects. We measure time by the motion of clocks or of the earth or of stars or electrons. Time with no objects moving in it would be meaningless. Space with no objects spread out in it would be meaningless. Space and time are the order of our objects. The objects are the order of our perceptions through our senses. A man is aware of objects spread out in space and moving in time. Science is the study of these objects, the ways in which they affect our senses, the ways in which they move in space and in time. Science discovers that objects move in certain sequences. For instance, day and night follow one another, the seasons follow one another in an invariable order. The sun, moon, and stars all move in an orderly fashion.

Men, by long and careful study of these movements, have discovered a very complex order of their sequences in space and time. Men are able to project these sequences into the future and to predict the exact time and place of an eclipse. They are able to project them into past time also and tell what has happened in the distant past.

The heavenly bodies are not the only objects studied by science. Men study the movements in space and time of all bodies, rocks, plants, animals, and even human bodies. They discover the sequences in the external movements and in the internal movements or changes in these bodies. One of the most significant sequences in the space and time movements or changes discovered in both inorganic and organic bodies is called evolution.

According to evolution, the particles of all the bodies we know, organic as well as inorganic, were star dust a long time ago. When any body is analyzed it is found to be made up of billions of molecules, all acting together in a pattern. When any molecule is analyzed it is found to be made up of atoms, moving together in a pattern. And when any atom is analyzed it is found to be made up of sub-atoms moving together in a pattern.

There are thousands of kinds of molecules; there are about a hundred kinds of atoms, and there are not more than a dozen kinds of sub-atoms. And we may infer that all the sub-atoms are patterns of *one* kind of body, the smallest, the Ult-atom.

According to evolution, these sub-atoms are endowed with "resident force," the impulse, or tendency, or will, to leap together into a pattern when they find themselves side by side in the correct order in space and time. There are about a hundred of these atomic patterns.

When atoms find themselves side by side in the correct order in space and time they leap together into patterns called molecules. The atoms cooperate to form molecules by "resident force," that is, by their own tendency or will. The atoms are themselves nothing but sub-atoms cooperating in patterns. Therefore, the will or "resident force" of the atom is the will of the sub-atoms (and of the Ult-atom).

According to evolution, the life of an organism is no more than the cooperation of the molecules in its body moving under necessity or their own will. The life is maintained by "resident force," that is, by the will of the molecules to cooperate in that particular pattern.

When food is absorbed into an organic body the molecules of the food leap into the pattern of molecules that form the body by "resident force" or by the will of all the molecules, both those in the food as well as those in the living body. Once the molecules of the food are in the new pattern they are molecules of the living organism.

THE STUDENT:

Could nonliving molecules leap together to form an organism?

THE PROFESSOR:

Although we have no observed instance of nonliving molecules leaping into a pattern to create a new living organism, we have no reason to suppose that the molecules could not do this if the right kinds found themselves in the correct order in space and time. According to evolution we have no reason to believe that life did not originate in this manner.

According to evolution, by necessity, by "resident force," by the will of the particles, Ult-atoms and sub-atoms leap into patterns to create atoms; atoms leap into patterns to form molecules; molecules leap into patterns to create living organisms; and the changes in the bodies of organisms, from the lowest to the highest, have been a continuation of an unbroken sequence of movements of Ult-atoms from star dust to our own bodies.

THE STUDENT:

This seems to omit mentality.

THE PROFESSOR:

A man is aware of his own body as one of the objects in his space-time perception universe just as he is aware of other objects such as stars or stones. But he is also aware of something else in connection with his own body. He is aware of his awareness, his feelings, his consciousness, his mind. He cannot become directly aware of mentality in any body but his own. He infers mentality in other bodies like his own, in other men, in the higher animals.

He might very well infer a dim mentality in even the lowest form of life. And if evolution is a correct view, that is, if organisms are no more than patterns of molecules, cooperating by their own will, that is, moving in patterns by necessity or "resident force," then he might infer that the rudiments of mentality exist in molecules, in atoms, in sub-atoms, in the Ult-atom—just as the rudiments of organic bodies exist in those simpler particles.

If it is true that a man—his mind as well as his body—is a pattern of moving Ult-atoms, then it must follow that consciousness appears as a relation between Ult-atoms, those moving in the pattern in a man's brain and those moving in the objects which he perceives outside his body. When a man looks at a star his perception of the star is a relationship between the moving Ult-atoms in his own brain and the moving Ult-atoms in the star. Thus he uses consciousness as a net to ensnare all matter (and all mind), the universe.

The Ult-atoms in the brain and the Ult-atoms in the star were in a relationship long ago when our solar system was star dust. That relationship was then a mental as well as a physical relationship.

This answers your question how matter, all matter, is and always has been continuous with the consciousness of the person.

THE STUDENT:

Do you mean to suggest that the person was in existence even back in the days before there were days, back when the earth and all planets and all solar systems were only star dust!

THE PROFESSOR:

All matter is in direct relation to the consciousness of the person and has been in that direct relation eternally, because our consciousness appears as the mental relationship of the particles of matter in our brains and in the star dust. Thus it can be said that matter has no existence except as it appears in mind and since mind or consciousness is found only in the person, all existence (including matter) springs out of The Person. The changes of consciousness are always coincident with the changes or movements of the particles of matter in the brain and outside of the brain, affecting it through the senses.

A vivid or intense state of consciousness is always coincident with a very harmonious organization of the particles of matter in the brain and sense organs in relationship to the objects in the environment. The consciousness is more perfect, or more intensified, or more clearly focused the more widespread the harmony in the organization of the particles of matter. All the particles in the universe.

All physical bodies, sub-atoms, atoms, molecules, organisms, consist of particles moving in harmonious patterns. In the brain of a man the particles of matter move in harmonious patterns, in one continuous pattern with the whole universe. In the mind of the man his ideas move in harmonious patterns also.

There is evidence that there is always a parallel between these two sets of patterns. An injury to certain parts of the brain results in an injury to certain idea patterns. For instance an injury to the temporal lobes causes an injury to the hearing. In the feeble-minded certain sections of the brain are distinctly undeveloped, in the insane certain sections are often found by autopsy to be injured. In fact, the aberrations of idea patterns in the person whose brain is injured often guide the surgeon to the exact spot on which to trepan the skull and remove the clot of blood which disturbed the harmonious patterns of the particles of matter in the brain and coincidently disturbed the harmonious patterns of ideas.

THE STUDENT:

Are these sequences of patterns of ideas coincident and parallel to all sequences of patterns of the moving particles of matter?

THE PROFESSOR:

The sequence of the patterns of the particles of matter and the sequence of the patterns of the ideas are not merely coincident and parallel, they are essentially identical. Time and space are not entities independent of these sequences of the patterns of matter and mind. Time and space are themselves the very sequences. Apart from matter and mind there could be no time and space just as apart from a wheel there could be no turning of that wheel. It is absurd then to suppose that there was a time in the distant past or a place remote in space where matter existed or exists independent of mind.

Each man's consciousness of any given object in the present "now" or any other "now" contains in itself the very essence of time and space, therefore it fills all time and space. All existence is and always has been in contact with our thought.

The universe consists of patterns within patterns. All bodies living and nonliving consist of molecules moving in patterns.

There are about a dozen kinds of sub-atoms. It seems probable that science will discover a still simpler particle, the Ult-atom, and that all the kinds of sub-atoms will be found to consist of patterns of Ult-atoms.

If light consists of moving particles called quanta, it may turn out that each of these quanta is made up of one or more Ult-atoms. It will then be seen that all existence consists of patterns of Ult-atoms and that all Ult-atoms are alike.

THE STUDENT:

Is each Ult-atom to be regarded as a geometrical point, with no dimensions?

THE PROFESSOR:

The geometrical point, like the absolutely straight line, is purely imaginary. The potential is that which can be made actual. The actual is that which reaches the observer's consciousness through the agency of his senses (often helped by his improvised instruments), and organized by the categories of his understanding. An infinitely small point and an absolutely straight line are not realizable and of course not potential, therefore they are purely imaginary. Since the Ult-atom is actual (although the smallest body that can affect the senses) it would be misleading to say that it is a geometrical point. Yet the bulk of that body must be a minimum, an ultimately small unit that is not to be made smaller except in an unreal (imaginary) manner.

THE STUDENT:

Doesn't modern advanced physical theory assume that matter dissolves into energy?

THE PROFESSOR:

In Einstein's law, "mass" is equated to "energy" and "mass" is a synonym of matter. A tornado, or a whirlwind, an atom, or a quantum, can be thought of as a bundle of pure "force" or "energy." Yet each of these concepts (for the purpose of the investigation of the truth) can be treated as "a body of matter" with size in space, and motion through space and time. Also each of these "bundles of energy" can be regarded as composed of smaller bodies whirling about within that larger body. If "mass" and "energy" can be transformed, each into the other, then any "body" can be called a "bundle of mass-energy." And the Ult-atom can be regarded as the smallest actual (and potential) unit or body of "mass-energy."

THE STUDENT:

Are all Ult-atoms absolutely alike?

THE PROFESSOR:

The only difference between any two Ult-atoms is a space-time difference. All the innumerable patterns of sub-atoms, atoms, molecules, stones, suns, planets, trees, fishes, birds, mammals, and individual men differ one from another only in the number of Ult-atoms in each pattern and in the distances and movements of these Ult-atoms in the patterns relative to other Ult-atoms. This is a space-time relationship.

Patterns are numberless in their variety but all Ult-atoms are alike. Any object or particle not an Ult-atom is a pattern filled with Ult-atoms in a space-time relationship.

The only difference between one Ult-atom and another is its position in space relative to other Ult-atoms and its motion or change of position in time. Even in these differences of positions and movements any two Ult-atoms may exchange differences, each taking the position and movement of the other like two dancing clowns exchanging masks.

There is left then no shred of difference between one Ult-atom and another. They are all absolutely identical. It seems that Ult-atoms still have their plurality as they fill patterns in space-time. But time is measured by the motion of the particles. In fact, time *is* the motion of the particles. Aside from motion of the particles time would be meaningless.

But motion is only change of distances between one particle and others, and distances are spaces. Therefore time is only change in the sizes of spaces. Space is not only the measure of the separateness of the particles, space *is* the separateness of the particles. Aside from separateness of the particles space would be meaningless. And the plurality of the Ult-atom is robbed of its significance by the absolute likeness between any one Ult-atom and any other. Therefore the category of number (like the categories of space and time) loses its meaning here and there is but *one* Ult-atom.

If we follow out rigorously to its logical conclusion the direction which science carries our thought we find that this terribly simple Ult-atom swallows up everything, all that we are aware of, even time, space and number (and all other categories of thought) in its absolute simplicity. We have here all existence (all bodies and all minds and all their interrelationships) reduced to *one* Absolutely Simple Ult-atom.

THE STUDENT:

This conclusion ought to be profoundly satisfying but I find it profoundly disappointing. It seems rigorously logical. The Cynic accepts it bitterly, grimly, and suppresses this rebellion which I feel against it. Maybe he is right.

The Mystic refuses to accept this chilling conclusion and turns to fantastic structures of dreams. Maybe he is right.

The Agnostic admits the inadequacy of the austere conclusion of science and he discredits the flimsy dreams of the Mystic, but he doubts the cocksureness of the Cynic. He admits that there must be Something Else, but he is cocksure also that it is Absolutely Unknowable. Which of them is right?

THE PROFESSOR:

There is truth in all their views. They are like the blind men with the elephant. The Cynic is right to emphasize the importance of science, and to ignore the mystic dreams. The Mystic is right to insist that our aspirations to a better life than we find now and here are justified. The Agnostic is right when he recognizes that there must be Something Else.

The Cynic is wrong to deny dogmatically the very existence of the Something Else. The Mystic is wrong to assert that we can know merely by dreaming. The Agnostic is wrong to insist that we know nothing about the Something Else.

The Cynic opposes the vast pretended positive knowledge of the Mystic by an equally pretended negative knowledge. The Agnostic sees both errors and tries to correct both, but in his efforts he falls into the contradiction which asserts that we know an Unknowable.

There is a knowable and understandable knowledge which does not come through the Senses, but through the Will to Live.

Life is a high organization of the Ult-atoms all moving in patterns. These patterns change in definite sequences. A man is one of these patterns and its sequences. But he is conscious also of the Will to Live, the will to make his pattern, his sequence, secure and eternal. This Will to Live is a knowledge which transcends the mere sense knowledge of the moving pictures of patterns and sequences. This Will to Live, which is also called Faith or Morale, is a knowledge of the Great Something Else, admitted to exist by that great doubter, the Agnostic.

THE STUDENT:

But isn't that Something Else merely the Universe?

THE PROFESSOR:

The Universe is only a name for the totality of our awareness. The Universe changes in time, it is different in different places. We ought to give that Something Else a name which would indicate that it is not merely the content of our finite awareness no matter how much the scientists enlarge that awareness, a name that would indicate that the Something Else has no color, no sound, no qualities whatever. It is not confined to here or there. It is not confined to now or then. It is eternal. It is the ALL in ALL. It is "the same yesterday, today and forever."

THE STUDENT:

It is God!

THE PROFESSOR:

Yes, it is God. "In Him we live and move and have our being." All matter, and all our brothers, and all living things—God—is in contact with the heart that glows within.

THE STUDENT:

Then is God nothing but the Totality of all that we are aware of?

THE PROFESSOR:

The Totality of all that we are aware of consists of patterns of Ult-atoms in time and space. Somehow God must be beyond all time and space. All patterns of particles, even an Absolute Overpattern of all particles, would fall short of comprehending His Being.

THE STUDENT:

Then is God Infinite Mind or Soul?

THE PROFESSOR:

Mind or Soul, your mind or soul, is a thing that presents itself to your awareness. Of course you become aware of an outside object, a mountain or a tornado, in a manner somewhat different from the way you become aware of your mind or soul, but nevertheless your mind is one of the things having certain characteristics which separate it from other things as a mountain or a storm. To assume that God is no more than a Gigantic Mentality or an Infinite Soul would be like assuming that He is no more than a Gigantic Mountain or an Infinite Storm. Our conception of mentality or soul is, after all, only a section of our total awareness. We separate our concept of mind or soul from our concept of body. We also separate our concepts of external things such as winds and mountains from our concepts of our own mind and our own body. This is legitimate, and necessary to our thinking. But we may not carry this manner of thinking over into our concept of God.

THE STUDENT:

Must we then think of God as a Great Abstraction and not as a Person?

THE PROFESSOR:

Our concept of a person is not an abstraction, it is the most inclusive and concrete concept we have. A person is not merely a mind or soul any more than he is merely a body. A person is a body composed of particles of matter marvelously organized to act in an exquisite cooperation, but he is vastly more than that. He is a focus of consciousness, and that consciousness is a reflection of the universe, a micro-mirror of all reality.

Each of us is aware of himself as such a person. Yet paradoxically each has a conviction of his own limitations. He feels himself expanding momentarily. He is aware of the expansion of his own personality in past time. He cannot escape the conviction or faith that there is a vast Something which will always transcend all his expanding awareness. He is certain that this vast transcendent Something is in a very vital relation to his own personality. His early naive impulse is to identify this Something with some piece of his awareness, a stick, a stone, a statue, a picture, an animal, a great man. He later identifies the Great Something with mind or soul or Spirit. Still later he identifies the Great Something with the most inclusive concept in his awareness, namely the concrete concept of Personality.

We can find for God no concept more adequate. But we must be cautious here. We must remember that even the concept of Personality, this most inclusive and least abstract concept of which we are aware, is likely to be subject to limitations if we do not guard it in our thought. Men try to guard this concept of the Personal God by such adjectives as Infinite, Omniscient, Omnipotent, Omnipresent, Absolute, and so on. But when we attempt to apply our ordinary logic to these words we quickly arrive at absurdities which involve us in embarrassments or else in pious insincerities.

We have to admit that our concept of God, even when carried to the logical limits of a Transcendent Concrete Personality, is not to be dealt with by the measuring rods of ordinary awareness, such, for instance, as that "common sense" measuring rod we call logic.

Yet we need to assure ourselves of a harmonious relationship between our own personality and that of God. No man can ignore the vast Something, even if he refuses to call the "something" by that ancient name God. The man who declares himself an "atheist" still must deal in his reactions to life with that "Something" which transcends the fringes of his awareness. Even such a man (if he is honest with himself) finds no comfort and no rest until he submits to a sense of harmony with that "Something."

THE STUDENT:

We may grant that God is a Person but how can we know that He is not a Cruel Ogre torturing us senselessly, or at least a self-centered Person intent upon His own purposes, as careless of our good as the plowman is careless of the good of the hosts of insects which he crushes under his plowshare?

THE PROFESSOR:

When we examine the results of science—that body of knowledge which is nothing more than the careful enlargement of our ordinary awareness, our "common sense"—we see a great movement of matter exhibited before us. We call this movement evolution. We may define it as the movement of the Ult-atom in such a way as to produce living beings of an ever higher and higher order.

The impulse or tendency of these living beings is to achieve greater and greater power over their environment, the unorganized chaos. We may express this by saying that these living beings all have the Will to Live. This will or impulse is in them all, and it is the "resident force" in the particles of matter, the very dust that enters their bodies and constitutes the substance of those bodies. This Will to Live, then, is the universal tendency of everything that appears in our awareness.

Successful life or triumphant personality is the aim of the Universe. We thus identify the Will of Man and the Will of God. This is what we mean by the Emprise Supreme. This Will of Man, this Totality of our impulses, this determination to make our lives successful is what Kant means by the Practical Reason.

It is also known as Morale or the Will to Win, to win the greatest prize of all—the prize of life. The religious man calls it Faith. It is Faith in God's goodness or good will to Man.

Science leads us to evolution which is an exhibition of the struggle of matter or things, or all the universe, toward successful abundant life. This Will is our Faith in God's goodness toward us.

Both externally (in the world) and internally (in our own hearts) we become aware of the Will of God, the Will of Man, the Emprise Supreme. God is All in All. He is Transcendent Personality, Willing for man an abundant successful Life, exactly what Man wills for himself. Man also is a concrete personality in intimate contact with God and therefore in actual contact with all reality.

THE STUDENT:

Then to know anything is to know something of God. The Ult-atom turns out to be another name for God, the Father of us all, the Person Absolute.

CALIFORNIA POPPIES

By JOHN C. VIVIAN

I glided easily through a cloud
Floating o'er the foggy shroud
When suddenly I exclaimed aloud:
"Oh, look! The golden poppies!"

Gleaming as the heavens shine
Blinking in their orbs, sublime,
They formed a never-ending line—
Those hordes of gorgeous poppies.

The sea beside them danced but they
Defied the glistening waves so gay
Yet seemed to court a brighter day—
Those bowing, bending poppies.

So oft, when in my rest I lie
With searching or receptive eye,
I seem to crave to be close by
Those luscious, lovely poppies!

Science and the Naturalization of Man

BY

JAMES STREET FULTON

HISTORICALLY, as science expanded its conquests and consolidated its victories, man himself has been brought increasingly within its scope and shown to be *of* as well as *in* nature; he has been "naturalized" as a citizen (or more accurately, a denizen) of the world of objects, and has learned to consider himself a fact in a world of facts. Science is matter-of-fact. It takes an interest only in objective regularities which can be certified ultimately by observations possible to anybody with normal senses. From its point of view, the significant thing is not the fall of man but his descent; not his actions, but his reactions; not his character, but his complexes; not his education, but his conditioning; not what he might individually be, but what he will on the average do; not his destiny, but his actuarial life-expectancy. The scientific approach confines the study of man to the aspects of his observable behavior which exhibit stable relations to other elements in isolable systems of facts. Man is "naturalized" to the extent that he is understood by the sciences current at a given time. If he finds his existence significant also in other ways, he can hardly fail to consider himself to transcend nature.

"Science" and "nature" are thus explicitly correlated. "Science" is systematic knowledge obtained by perceptual verification of logically formulated theory. "Nature" is its objective correlate. Whatever is knowable by scientific methods is natural, and whatever is natural is knowable by scientific methods. The boundaries of what we conceive to be nature, therefore, fluctuate with the scope of scientific interest, accomplishment, and (less logically) prestige. Whether nature is identical with reality is a metaphysical question, which this specification of the concept obviously does not settle. The affirmation that reality is identical with nature is the basic tenet of naturalism. The corresponding theory of knowledge may be designated "scientism," to give a name to the opinion that the scientific method is the only method of obtaining insight into reality. Naturalism has continually modified its materialism and mechanism with the advance of scientific thought; but it is still bound to conceive of reality as an order of objective facts about which sense perception provides the primitive reports.

From Descartes' bold conjecture that a living body is nothing more than an intricate natural clockwork, a straight line runs to the explanations of the youngest science, cybernetics, which considers the body an intricate natural communication system. Chemistry since Lavoisier and biological sciences, especially since Darwin, have included the human body under their generalization without hesitation. Psychologist, anthropologist, sociologist, and economist have successfully applied objective methods to some of the more complex phenomena of human behavior.

Each extension of empirical methods to new aspects of human life brings to light new causal or statistical regularities. And nobody doubts that further successes of this kind await the future. Yet these specialists can in no case explain themselves. They must assume the ability to weigh beliefs by the reliable evidence for them and to apportion assent accordingly. Every social belief may be understood, for example, in terms of economic conditioning, except the theory of economic conditioning itself. The computing machine can calculate, not reason—nor do men have to reason when they calculate; but men can err, while a machine only fails. And so on. The point is that the person who knows is active; he lives in this activity as the present mode of his being; he possesses some awareness of the value and significance of what he is doing. On the side of the object, he respects the evidence and seeks the truth which it utters; in his own person he expresses veracity as normative for his cognitions and communications. Thus he is conscious of living above the facts. This consciousness provided partial motivation for Descartes' dualism. He was aware of himself as thinker and doubter; that is, as falling short of perfection, the idea of which filled his mind as the mark left by the divine Workman upon His creature. And so he seemed to live both in and beyond the nature revealed by sense.

A scientific idea is rejected if publicly verifiable facts do not corroborate it. The conception of perfection condemns facts which are out of accord with it, and motivates consciousness of an obligation to change them. As long as the sciences fail to provide means of determining which conception of perfection is best or most correct, so long will morally serious men be aware of a division within their existence, as if they were amphibians living partly in nature and partly not. Most scientists should fall into this class, for science owes its vitality to the conviction that the fact of deep ignorance and widespread superstition is evil and ought to be replaced by true knowledge; otherwise it is impossible to understand why men submit themselves to the arduous discipline of research. Even the Baconian view that the chief value of science lies in its utility frankly derives the ends of action from other sources.

One appealing way to dispose of this difficulty is to deny that it exists. There is logical and there is factual knowledge. Intellectually everything else is either misunderstanding or obscurantism. Whatever the sentence "This is good" means, it does not mean that this *is* good, for "good" has no objective meaning. This position would be considerably more persuasive if truth were not itself a value, so that the position could be stated without assuming that clear meanings and verified theories are better than confusion and error.

Another way to dispose of the difficulty is to attack it boldly with the affirmation that the only intelligible meaning the idea of perfection can have must be gradually won for it by using the experimental method of science itself. The unresolved difficulty in this position seems to me to be the failure to make clear the precise manner in which significant verification of normative judgments is possible. Scientific hypotheses are verified by quite specific and particular experiences which possess universal significance because they are believed to have been produced in such a way as to make them typical. But an hypothesis about the good to be achieved can receive the same sort of verification only if a specific resultant event or quality can be accepted without qualification as good and as typical. This, however, is questioned by the positivists, not to mention others. If, on the other hand, it is added that an absolute judgment is not needed, since each result is provisional, each end a means; then this postpones the decision forever. It puts off the affirmation "This is good" until every consequence has accrued; or else it anticipates the consequences and judges them in relation to an ideal system or in terms of their expected contribution toward the production and maintenance of a universal and abiding order that is good. Such an order, however, is neither fact nor verifiable inference from fact. Thus the scientific test of a normative proposition by its empirical consequences either commits the naturalistic fallacy of identifying the good with some detail of actuality, or it assumes the validity of norms which the process does not verify.

A third way to dispose of the difficulty admits that empirical verification of normative propositions by value observations is not possible, but adds, "Neither is it necessary." It is not possible, we are told, because there are no purely ethical facts. It is not necessary because there are natural facts to verify the unavoidable factual presuppositions of any normative theory. The paradox of moral authority, therefore, vanishes; normative propositions do not both require and forbid empirical verification. What is forbidden is verification by cultural facts, including every actual judgment of value. Experience of a fact as good reflects the special normative theory of a particular culture. To ignore the cultural conditioning of actual value experiences conceals a dogmatism under the appearance of objectivity. It begs the vital question: Is one's sense of values what it ought to be?

On the other hand, since normative propositions are synthetic, the paradox of moral authority could not, on this view, have a solution except that it is possible to consult natural facts for the empirical support which synthetic propositions require. At best, however, natural fact provides a most indirect test. The normative theories of a given culture reflect the ideas of the world and man which have been derived from its natural science, however primitive. These ideas have some foundation in observations made upon nature, and their adequacy or lack thereof can be tested best by objective methods of empirical science. The normative theory which follows from tested ideas is the correct theory. The measure or criterion of correct normative judgment is the set of supreme presuppositions of scientific knowledge. "Good," therefore, is only a name for the basic principles of the philosophy of nature and of man as the knower and observer of nature. These principles derive their truth from the empirical facts disclosed by the natural sciences.

In a word, various cultures are made by men acting under various philosophical ideas; the best culture will be created when men act under true ideas. These are due to natural science alone. This theory appears to dispose of the basic difficulty by denying independent meaning to the idea of perfection. It is the same as the idea of the nature of things, which is a matter of fact. The "good" is true; but the "truth" is not in a distinctive sense good.

If "good" applies to everything consistent with the philosophy of nature, it must apply to everything that exists. On the other hand, if the theory has in view the rejection of some cultural facts as "contrary to nature," then it evades the fallacy of ignoring the cultural conditioning of value judgments by installing the naturalistic fallacy at the basis of metaphysics. It removes the difficulty from the confusion of actual experience to the empyrean of philosophical ultimates.

If valuation thus depends on knowledge of matters of fact, what of the values on which natural science itself depends? Science is a cultural institution. Its existence presupposes the cultivation of certain social values, not to mention the valuations involved in the choice of "significant" evidence and "significant" problems, or the utilitarian considerations which so plainly influence the course of research. Moreover, it is not entirely clear how normative propositions imposing an obligation upon the will can be deduced, even indirectly, from natural facts alone. The utmost that can be deduced from factual theory is a set of possibilities corresponding to various specifications of circumstances. If we fix certain variables, then we can predict a certain course of nature and determine by observation whether the prediction has been confirmed by the actual course of events. But which values shall we assign to our variables? A choice enters the procedure here which a knowledge of natural laws cannot prove correct, in any sense relevant to ethics. *A fortiori*, no cultural ideal can be specified as the correct or most adequate one in terms of natural laws alone, for natural laws hold regardless of culture. We cannot repeal the statistical laws of genetics, though we may select breeding stock so as to reduce the range of possible variation. Whatever we breed for, the laws remain the same. Genetics does not imply eugenics. A similar argument applies to every like attempt to derive social norms from natural knowledge, including the attempt to deduce a universally acceptable normative social theory from the philosophy of nature and scientific epistemology. Even assuming such a deduction to be a good thing, we obtain binding normative propositions only from a philosophy which includes some true estimate of man's distinctively moral nature and spiritual possibilities. If the proposed method can verify the ends of human action, it cannot have been completely purged of surreptitious ethical assumptions.

The paradox of moral authority, therefore, has not found its solution. The sense in which normative theory is true to fact is not the sense in which it is obligatory for moral action. Must we mystically assert the validity of our moral intuitions and, it may be, look to our weapons? Or may we escape from the paradox by an avenue as yet unexplored?

Let us look at the other side of the paradox: namely, synthetic propositions demand empirical confirmation. It may be agreed that ethics cannot be turned into an experimental science based on purely ethical facts which simply await observation. Does that mean that men cannot grow in moral understanding through critical reflection; through revealing moments of heightened sensitivity to the moral structure of human relationships; through appreciation of unobtrusive acts of quiet courage, forgiveness, mercy, devotion, repentance; or through revulsion against their opposites? Not purely ethical, no doubt, these experiences seem distinctively ethical. It should not be expected that they will resemble simple, indubitable intuitions of minimal facts such as sense data, which could stubbornly decide forever a crucial experiment. Normative judgments can resist intellectual and moral doubt, in the end, only with the help of a total philosophy. In this respect the attempt, which we have noticed, to root normative theory in a scientistic metaphysics follows a sound principle. Consisting in a scientific ontology and scientific epistemology, this philosophy seems to offer an account of man which is adequate only to his activities as scientist. Is man simply an observer, in so far as he is not an object of observation?

In rejecting the culturalistic fallacy, this philosophy hints at something quite different. That fallacy represents a failure to ask the critical question: Is my sense of "goodness" what it ought to be? This places the emphasis on the quality of the person who judges; if he is not a certain kind of being, his moral vision will be distorted. So sensitive to this personal condition of normative judgments is scientism, that it rejects the whole panoply of individual and social evaluations as vulnerable to its special kind of Cartesian doubt, and seeks assurance in natural science, the impersonality of which reduces the moral dimension to a minimum. But if a warped character displays itself in a warped sense of "goodness," what guarantee have we that this bias will be inoperative in the alleged deduction of an ideology from our philosophy of nature? If moral judgment is so accidental, so corrupted by cultural circumstance, does it seriously matter how scientific we are otherwise? The crucial difficulty of rising above circumstances in respect to the personal relations which are produced and sustained by moral action, is not solved by being objective with respect to the impersonal relations of natural facts. If this difficulty cannot be overcome in the arena of action—the cultural—what hope have we of success elsewhere? On the other hand, if determination by cultural conditioning can be transcended by the scientific intelligence, there seems to be no compelling reason to deny that, for all its admitted wilfulness and bias, moral judgment may also contain clues to genuine goodness. How else, in truth, can we be aware of cultural bias as a moral stumbling block unless already we stand above it?

These considerations seem to suggest another hypothesis for the solution of the paradox of normative theory. Perhaps the empiricism of factual science differs from the empiricism of moral agency. The aim of scientific method is to produce universal agreement about facts among men who, as scientists, have identical purposes. The object of the moral life is to produce and sustain an order of harmonious purposes among men in the midst of every diversity of factual circumstances. For science, one observer is as good as another, provided the observation is made. But as a purposive activity, each person has unique significance; he must live his own life. This profound difference in problem and purpose may not unreasonably be expected to exhibit itself in different approaches to experience.

In order to obtain general agreement about matters of fact, men of science have learned how to correlate their logically exact theories with aspects of nature in the observation of which the error due to differences among observers is negligible. Sensible experience is reduced with the help of instruments and theory to simple items on which drastic disagreement rarely, if ever, occurs. Every effort is made to prevent anything peculiar to the individual from having an effect on the outcome of the observation. In the moral life, on the other hand, the only instrument of observation is the self as a whole, the moral life itself in the act of being lived, well or ill. And this, admittedly, is conditioned both naturally and culturally.

Does this prepare the scene for the subjectivist to celebrate his triumph? It does, if scientific verification is the only kind possible, if normative judgments must be tested by observations which require little more than the possession of normal senses. It does *not*, if there is a test which requires the alerting of the whole person and the employment, in fear and trembling, of all his powers—not only his powers of observation but those of feeling, imagination, thought, and determination, and—patience. A normative proposition has no empirical test but the effort to live up to it consciously and fully and without compromise, to realize in the ontological medium of personal existence the policy implied by the proposition. This attempt may aid us to a deeper and truer understanding of the possibilities of personal existence, which would at the same time be a modification of the judging self. It could also yield a deeper understanding of the self and of the kind of total reality (call it nature, if you please) which could require the existence of such a self. It may be that this understanding is not bought without anxious care and suffering and repentance, for these attend the acceptance of responsibility for the effects of one's existence upon existence. To live with some consciousness of self as a responsible agency in real, active relations with other beings, and as a person in moral relations with other persons, may be a more revealing experience than is implied by the common ability to use the senses, even when these are correlated with the concepts of a deductively formulated theory.

That this cannot be taken into the laboratory or tested by Dr. Gallup is neither here nor there. Nobody considers physics subjective just because not every man is a physicist or every physicist a creative agency in science like Newton or Einstein. But creativeness is precisely what the moral life requires of us: the invention and production in the fluid medium of life of real bonds of personal intimacy. That is both our hope and our despair.

Life is active. Its inward meaning can only be discerned through being active, through making the effort—not to know a fact—but to live a truth. This is the process, as it seems to me, which Socrates intellectualized in his emphasis on knowledge. Even so, he left no doubt that he was concerned to know the self by a critical examination of life, and he did not hesitate to supplement the scientific ontology of his day with hints derived from reasoned aspiration. Yet this is not his deepest lesson. He saw that the examination of life is not merely theoretical, but is itself a mode of life. The only proof that it is worth living is to live it consistently and ungrudgingly to the end. In persisting to the death, without rancor, without envy, without regret, his personal existence bore witness to a truth that he had divined. The difficulty is to be the kind of self which can decipher the testimony of such a witness.

A Group of F. C. S. Schiller Letters

Ed. Note.

As a part of the acknowledgment of the philosophical development of West Coast philosophy, it seemed appropriate to print some of the correspondence of Dr. F. C. S. Schiller which came to the Editor, or was placed in his hands for use. The first two of the following were in connection with his call to the University of Southern California. The others were written to an American friend and contain material referring to his acquaintance with William James. Of this latter correspondence, other items appeared in the William James special issue of *The Personalist.*[1]

Corpus Christi College, Oxford,
18/6/26

Dear Professor Flewelling:

I was not able to reply to the interesting suggestions contained in yours of the 9th until today, because my own plans were so uncertain. They depended on a colleague who wanted to go on a croquet playing expedition to Australia & did not know whether he wd be selected to play for England, because we cd not *both* leave at the same time. However he has today informed me that no team can be got together & that he is not going away. In consequence I am handing in my resignation tomorrow, & shall be open to "temptation" . . . I realize that it may be difficult to make arrangements at such short notice & that from my point of view also it is a formidable journey to cross America in the middle of Septr, though I have never been far West & have always heard very fascinating accounts of California. So there is evidently much to be considered . . . I am glad to hear that Carr is coming over and hope to see him at the Mind Assn meeting at Cambridge on July 2, though it will be only a glimpse as I shall have to return to my papers speedily. Glad to hear also that you had such a good continental trip since you left Oxf. where the weather has been wretched all term . . . I am greatly looking forward to my rediscovery of America, the more so as I never went West before . . . Believe me

Sincerely yours,
F. C. S. Schiller

---

[1] Volume XXIII, No. 2. April, 1942. Pp. 172 ff.

The following protest to the Editor of *The Personalist* may be of interest.

Corpus Christi College, Oxford,
18/5/27

Dear Flewelling.

Your letter has just come & I sat down instanter & read my proofs. I seem to have succeeded in somewhat intimidating the P. D. [Printer's Devil] by my protest, pro tem, & he has not ventured to do more than play a little havoc with the punctuation. The Lord be praised & the Editor!

I am very glad you have printed my protests & defended your procedure because the reasons you give are the ones that I respected! And I don't think they are valid. For (1) Editors have other ways of penalizing inconsiderate authors who tamper with their text. (N.B. I'm not one of them; and only had to in this case because I was away from my library). They can warn them they mustn't do it, & if they heed not, refuse their MSS. (2) The dilatory can be dealt with by threatening them if they are not prompt the Editor will read their proofs! (3) Editors should stand no nonsense, *even from philosophers!* At present they are much too indulgent & think phil*ers*, capable *de tout*. (4) They should discriminate between the virtuous, who write legibly, clearly & punctually (like ME!)[2] & the villains whose unintelligible scrawls augment the sufferings of the reading world . . . Aren't you glad the L. A. River isn't the Mississippi [then in flood]?

Sincerely yours

The following letters to an American friend contain interesting reference to William James.

Davos-Dorf
28/12/04

Dear Mr. ———.

I am ashamed to notice how long I have left your interesting letter of the 9 Oct. unanswered, but the fact is that I have had a very trying and busy term owing to the illness and subsequent death of our late President Dr. Thomas Fowler. I happened to be Vice President and so had to transact a great deal of the business, and finally to manage the election of his successor which after one or two exciting contretemps came off happily about a week ago. Since then I have only just had time to get out here and breathe some pure Alpine air in the most glorious sunshine. I was much amused by your description of the Scientific Congress at St. Louis. You seem to have met a fair amount of pedants. I am sorry for them for they are forced to become such even if they are not so by nature, by their mode of life. But shorn of their professional

---

[2] Schiller's hand was unusually undecipherable, and the Secretary once could make out of "time-worn" paradoxes only "ring-worm" paradoxes.

'halo' most of them are very ordinary people indeed. In fact I don't think that the best ability in the land goes into the professorial profession to any large extent in America. In England we get better material but use it badly. And generally speaking the learned world is everywhere so organized as to prevent knowledge from advancing too rapidly and the rest of the world from getting too much interested in it. You I dare say would be able to make equally melancholy reflections on what passes for 'justice' when viewed from inside. So I had better give you some of my news. I had to decline the Cal. invitation[3] in the end, as it proved to be impossible to get there in anything like time after the end of our term. It is a great pity as I should have liked to revisit America and my old friends and to make new ones.

You have probably seen my various articles in Mind, S. P. R. Proceedings [Society for Psychical Research] and Hibbert Journal which is why I did not send you offprints; but if you would like some in addition I shall be happy to send you copies. The Myers art. [icle] is out at last in the Fortnightly for Jan. I may also send you a copy of the new 'Occult Review' to which I have (foolishly?) contributed a short article. If it is properly conducted I may write some more in it; but it is ticklish work writing for a new periodical the character of which one doesn't know. James has been in splendid form, don't you think, and he tells me he is also physically better. Dewey's review of *Humanism* I thought 1st rate and written with the grasp of a master. The Jan. Mind is to have a reply on Bradley's behalf by Joseph (of New College Oxf.). So the continuance of the controversy is provided for and Mind is likely to be congested for some time, so much so that 2 of my articles (one on A. E. Taylor's "Metaphysics" "Empiricism and the Absolute" and the other "Protagoras the Humanist" a Platonic dialogue) are not likely to be out for some time yet. However I may have something in the Hibbert by April or July.

With kind regards and best wishes for 1905, believe me

Ever sincerely yours,

Rome
24/12/08

Dear Mr. ———.

I am very much interested to hear that you also are going to descend into the arena, alias the Donnybrook Fair of Philosophy. For the more we are the merrier we shall be. Besides it will be really valuable to get some clue through the mazes of a very complicated controversy. I hope you will bring out how long ago James has stated the principles of his present views and how little notice was taken of his Psychology. Ch. 28., *The Will to Believe,* contains the 'principle of Peirce' in so many words but without the name (P. as J. practically confessed to me this summer is a man of straw and now in his dotage as see his art.[icle] in the Oct. Hibbert). I deserve I think some credit for having detected the epoch-making character of *The Will to Believe* in 1897 (tho' even I failed to grasp that of the Psychologist at a 1st reading!). As regards myself I may point out (1) that my views are much more systematic in thought than in the form of successive articles to which they are condemned by the scantiness of one's leisure, (2) that the next move is always prepared for by a hint and a promise (e.g. 'Protagoras' in the Pref.[ace] to Humanism'), (3) that the promises are always kept in the end (thus I am working at the 'reform of Logic' tho' I have not published any of the technical part). (4) What is published is largely conditioned by controversial needs. Thus 'Protagoras' was an answer to the people who said Pragmatism had no history; 'Plato' to those who said Plato had answered it long ago (but I had to wait for Joachim to say it in print in the pref.[ace] of his 'Truth'). Studies X replies to a charge of Solipsism (as was a forthcoming art.[icle] in the July Mind) Studies XIX to an assertion 'we make reality in no sense whatsoever' (we do in 7).' 'Humism and Humanism' and the Rationalistic Conception of Truth[1] (Aristotelian Society, March 1909—the paper I read in German at Heidelberg) and Studies III[2], V[3], XII[4] are similar replies to various charges e.g. (1) saying anything one likes is true, (2) confusing psychology with logic, (3) Joseph on James (4) charges of impiety, etc. I generally find it possible to show that these charges really recoil on those who bring them. But the core of the situation I have always considered to be the revolt of common sense psychology against formal logic which has ended in scepticism. Lastly my chief controversial difficulty has lain in the fact that whenever I tried to explain myself by starting from the views of my adversaries I found that they had not really understood the masters they professed to follow. Thus in 'Axioms as Postulates' I appealed to the students of Aristotle (*Hyle*) and Kant (Postul.) in Studies II to the Platonists, in XIX to Hegelians, and in each case was misrepresented because they had not grasped the significance of the doctrines I proposed to refashion.

---

[3] University of California at Berkeley.

James and I had some delightful talks last summer the result of which you'll find in *Journal of Philosophy* V. 25 which you should not miss. He has probably sent you a copy. I believe his book is to come out in the spring, but 2 of the lectures came out in the Hibbert (July & Oct.).

I have not been able so far to make a close study of the new S. P. R. Proceedings; but it is clear that the 'cross-correspondence' problem is very complicated. Probably when it is unravelled it will yield valuable light on the nature of the difficulties which beset communication between different planes of psychical existence and so will in the end assist us in controlling the conditions . . .

Ever sincerely yours,

Corpus Christi College, Oxford
21/4/09

Dear Mr. ———.

Yours of the 24 and 28/1/ have remained unanswered far too long and unless I do so now I know they will have to remain so until the exams are over in Aug. So I better thank you for them and your 'pragmatic' judgment before term begins. As to your questions: (1) James's Cal.[ifornia] pamphlet naming Pragmatism was not reviewed by me or reviewed in *Mind* because it was not sent there. (2) Stettheimer's book I've not seen. (3) I had an introduction to James when I first went to America and first met him in 1895. Of course we at once took to each other but I only met him 2 or 3 times and when in 1897 I returned to Oxford, I found that no one here had read him. When D. S. Miller in 1899 wanted to get up a discussion about his art.[icle] in the *Int.[ernational] J.[ournal] of Et.[hics]* and James had declined, he applied to me: I replied that he had misunderstood him I thought, but that he ought to know J's meaning better than I, seeing how much more intimate he had been with him. M. sent the letter on to J. who decided that my interpretation was the right one. This opened my eyes to the enormous possibilities of misunderstanding *The Will to Believe* and I, determined to defend the doctrine by extending it to scientific principles. Hence "Axioms as Postulates." (4) The gist of my Heidelberg paper—some new points are in the Aristotelian Society paper on the "Rationalistic Conclusion of Truth" which I sent you.

I hope to send you shortly an interesting discussion on Pluralism, see Mind p. 326, which announces *inter alia* the abandonment of Absolutism by A. E. Taylor. J. E. Russell wrote some[thing] apropos of the "Rationalistic Conclusion of Truth" paper that he had come to the conclusion that we were mainly right. Schinz' book *L'Antipragmatism* is interesting but not instructive in its criticism. But as their nature is calculated to do us more good than harm I've written a Critical Notice of the book for *Mind*. Pratt's "What is Pragmatism?" is more serious: tho' there is not an objection in it that can't easily be disposed of (except that to James's talk about a real object, which always misleads intellectualists into thinking him inconsistent and therefore seems to me bad tactics—but I think his explanation in the *Hibbert* review fully clears him). As regards tone both Schinz and Pratt are unexceptionable and politeness may now be regarded as reëstablished in the philosophical world. If the Pragmatism controversy has done nothing else, it has at least taught the British philosophers manners (of which they had become totally destitute under the regime of Bradley). By the way did you see that B. had joined the S. P. R.? It's the greatest miracle of the 20th century!

The art.[icle] on Pragmatism in the April Edinburgh Review (by Bertrand Russell) surprised me by its friendliness. I saw it in proof but have not yet seen either it or the quarterly which was to have contained H. V. Knox's art.[icle]. It is important and should be read. I am making hay of *Formal Logic* this term, which is an important step towards the new Logic. With kind regards,

Ever sincerely yours,

Corpus Christi College, Oxford,
16/12/10

Dear Mr. ———.

You may judge how busy I've been from the fact that I have left your interesting and important letter of the 9th Oct. unanswered all this time, in part no doubt because I could not get hold of the obituary of our dear friend W. J. which I promised to send you. I had lent this copy to a friend who honestly returned it tho' I had forgotten to whom I had lent it and I have another which I could not find. Have you heard anything of a 'Life and Letters'? We all have splendid letters and it certainly ought to be written, if only to bring it home to the general run of Americans what a great man they have lost. The obituaries were of course all inadequate, if only for reasons of space, and the articles will not be much better. However you should look out for MacDougall's in the S. P. R. Proc[eedings] and especially L. P. Jacks (of the Hibbert) in the Contemporary (?Jan.) which is very good (he showed it to me in proof). I also recommend his *Alchemy of Thought* which is delightful reading and an excellent and powerful book on our side. Dewey and D. S. Miller in the *Journal of Philosophy* were also worth reading. For my part I have heroically resisted various offers to write articles, partly because I wasn't given space and time eno' but also because the best thing I can do in the Master's honour is to follow his advice and bring out my Logic as soon as possible. I intend now to concentrate on systematic work, for which I think the time has come, and to eschew controversy, articles, reviewing, etc. as much as possible. Unfortunately one can't get out of such engagements altogether all at once, and one has of course to carry on one's ordinary work besides. This vacation for example will mostly be taken up with a new course of lectures on Ethics, and Easter with the International Congress at Bologna. So I shall probably not get my *Logic* done before the summer.

I hope you received a copy of the new edition of *Riddles*,[4] which the publishers seem to have been very dilatory in sending out, and that you will find it not altered too much. My aim was to change as little as possible so as to leave it open to me to write a more technical metaphysic should an opportunity come, while yet modifying what seemed no longer tenable. Still the preface is to a certain extent a blind, and must be read as ironical. Under the guise of modesty I was really hitting dogmatism pretty hard . . .

Ever sincerely yours,

(Gersau)
C. C. C., Oxford,
19/4/11

Dear Mr. ———.

I read your letter of the 12/3/ and your pragmatic judgment with great interest: many thanks for both. You will, since writing, probably have read McDougall's S. P. R. paper, which struck me as admirable, tho' he seems to me to have drawn much too extensive inferences from a certain vagueness in James's language on the future life question. I questioned McDougall as to the passages on which he based his interpretation and found he had put together some from the 'Pluralistic Universe' and others from 'Human Immortality' without taking into account the special context of the former and the note (?p. 28) in the latter, which explains that the 'transmission' theory need not be understood monistically. So that point can be cleared up. I had suggested to Constable's who wanted someone to do a shilling book on James, that McDougall might do it; but he seems to have declined in the end, and it will now be done by H. V. Knox. A young friend of mine, D. L. Murray, is also under contract to do a little book on Pragmatism for the same publishers, which I've promised to preface. So you see we shall continue to do some popularizing on our side, even tho' I shall have to reserve myself for the technical work. I am sending you herewith my Bologna paper on "Error," and you will probably get it again in a rather expanded form later on as read to the Aristotelian Society. It was I think the most novel communication made to the Congress, at which people in general only repeated themselves, as usual on such occasions. So, as it was new and closely reasoned, the discussion turned on Pragmatism in general, as at Heidelberg. But there was a marked difference of tone even among the Germans, who had read up the subject a little since, and had acquired a wholesome awe of me personally. At one of the receptions a little knot gathered round me and one asked leave to put to me a question. 'Go ahead' said I. 'If a murderer with a dagger came into a room where I was, it would be *useful* for me to believe that I was not there, but would it be true?' 'Pardon me, it would be useful for you to get *him* to believe that you were not there.' Collapse of the questioner. Finding myself promoted to be no longer a heavenstorming Giant, but an Olympian, I did not assent to the proposal to organize another special discussion on Pragmatism as at Heidelberg, tho' people were just as ready to supplement the inadequacy of the time officially allowed for discussions. Altogether the general tone of the general papers was pragmatic, at all events up to the point to which scientific pragmatism goes, thanks to the presence of Bergson, Boutroux, Enniquez (the president) besides myself, and the papers contributed by Arrhenius (excellent), Poincaré and Ostwald. Germany has quite enthused for Bergson, who is coming to give 2 lectures at Oxf. next term and will probably stay with me. The sections were a failure, as so many papers dropped out but the social side of the Congress was delightful especially an excursion to Ravenna. The next meeting in 1915 is to be in London, tho' Fullerton tried hard to get them to accept an invitation to Columbia. I'm sorry as I should have liked to revisit America; but the Frenchmen were afraid of the voyage . . .

---

[4] *Riddles of the Sphinx.*

Ever yours,

Corpus Christi College, Oxford,
19/8/12

Dear Mr. ———.

I have so long left unanswered a nice long letter of yours written last summer that you have probably despaired by now of ever hearing from me again. But the reason of my silence was entirely connected with my private affairs. I have been undergoing the common fate of all, in a peculiarly aggravated form for the past 1½ years, having lost my mother last Jan. after a most distressing illness and 3 operations (cancer), and have been rather shattered in the process. But I suppose one has to go on fighting as long as one can: only I could wish society were civilized eno' to concede one the right to die in cases where there is nothing to look forward to but aimless torture. However these are not the things I ought to write to you about: I sent you my last book *Formal Logic* in Feb. and I hope it reached you safely. It is a knockout for intellectualism, and I consider it the best thing I have written, and will no doubt be seen to be this in time. Meanwhile the enemy are taking it badly, with that mixture of dishonesty and stupidity that forms their chief intellectual equipment. i.e. they are trying to burke it, and reviewing it only superficially on the lines it cannot be supposed that all logicians have been wrong, nor admitted that this book contains anything new. On our side there was a review by Dewey in the *N. Y. Independent* (July 27); he did not however detect that what I called 'Formal Logic' included *all* the Logic that is taught anywhere. The alternative is, of course, the pragmatic logic, which I suppose I shall have to write, if I am spared. For the next few years however I fear I shall have to spend some time on discussions to make it clear that the old logic is completely 'bust' (altho' I don't want to), unless I can train up a band of people who will say things for me. Unfortunately my most efficient backer H. V. Knox has been very ill and hors de combat. You shd look out for D. L. Murray's *Pragmatism* in a one shilling series (Constable), which was written under my auspices. It has long been ready but is I fancy being held back for the autumn. Also I got a little article into the *N. Y. Independent* (Aug. 15), just to stir the waters a bit: it may amuse you. Have you read Flournoy's *James*? An exquisite book far better than Boutroux's, which has been translated. Knox's (1/ Constable) which also will be good has been delayed by his illness and will not be out for a long time yet. With sincere regards

Ever yours

The New Biology[1]

BY

MATILA GHYKA

IT HAS BECOME A COMMONPLACE observation to point out that the mechanical, deterministic pattern of the Universe as illustrated by Laplace in his image of the "Universal Brain" (which knowing speeds, masses, and positions of every particle at any given moment would be able in theory to foresee every subsequent state of the world, including the phenomena of life), has been replaced, as a result of the new physics, especially relativity and the quantum theory, by a more idealistic, or shall we say with Sir James Jeans, *mentalistic* point of view. The new conception, as Bertrand Russell once showed, brings us back to that of Pythagoras and Plato, where everything is arranged according to ideas and numbers (*Timaeus*); where, to quote here the new-Pythagorean Nicomachus of Gerasa, the only real, permanent things (apart from ideas) are structures (not substance); where, in accord with Gustave Le Bon's prediction, matter has become dematerialized, reduced first to pure electricity, then to ultra-immaterial "waves of knowledge"; and where the theory of groups has replaced the equations of Lagrange, allowing Eddington to calculate by a brilliant algebraical "Indian rope trick" the number of electrons in the universe and its other basic, invariant, numerical constants.

There is (another return of Pythagoras and Plato) harmony and design in those structure patterns, whether the harmony and the group-structure are reflections of archetypes situated in the mind of the "Great Ordering One" (a Mind quite distinct from Laplace's "Universal Brain"), or (which would be even more puzzling) whether they reflect patterns pre-existing in the mind of man, to quote Eddington: "All that Physics shows us in the external world is a structure which is in agreement with the Theory of Groups, a group structure, and this structure is equally found in our minds."

---

[1] *The Searchers.* By Gustaf Strömberg. David McKay Co., 1948.

The Beginning and End of the World. By Edmund Taylor Whittaker. Oxford University Press, 1942.

Elements de Psycho-Biologie. By M. Raymond Ruyer.

The existence of an Universal Mind or Soul of the World (the *Nous* of Plato and Plotinus), far from being spurned by modern science, fits perfectly within this frame, and would be in fact a most useful hypothesis; to quote Eddington again: "The idea of a universal mind or *logos* would be a quite plausible inference to be drawn from the actual state of physical theories." Another mathematician (Professor Whittaker of Edinburgh University) has proved, in using purely mathematical and thermodynamical reasoning, the necessity of an "absolute beginning" in time of our physical universe, a beginning which can be taken either as a creation *ab nihilo* (Whittaker's interpretation) or at least as a dynamic and "improbable" rupture of the isotropic thermodynamical equilibrium by a deliberate act or intervention, or "kick off," presupposing again as agent an external deity or demiurge.

The last refuge of the old mechanistic determinism, with its "epiphenomenal" consciousness (which, as pointed out ironically by Stuart Mill, would be only a series of physico-chemical reactions, but would know itself to be only such a series) is biology, with its materialistic citadels behaviorism and *Gestalt* theory (the materialistic brand, in which the bare fact of being assembled in a pattern or constellation confers a new, "pseudo-psychical" quality to the mosaic of purely physico-chemical elements).

But even here a new point of view has lately made its appearance, which may be called anti-mechanistic, idealistic, or vitalistic (although its holders prefer not to advertise this last label), and even teleological. It is based on either purely biological or purely mathematical considerations, and on observations which contradict absolutely the old mechanistic or "epiphenomenal" dogmas, and has brought forward simultaneously in the United States as well as in Europe a new working hypothesis, which might explain satisfactorily the most puzzling of biological phenomena, especially those related to embryology, growth, and organization in general. Before presenting it, we shall first enumerate a few general biological observations which seem from the start to contradict mechanistic determinism (and its corollary: that all the characteristics of life are "epiphenomenal" and derived only from physico-chemical reactions):

(a) The "improbable" phenomenon of autoregulation in living organisms, for instance, the regulation of blood temperature in mammals (to quote a distinguished chemist, Professor Lawrence Henderson: "there is no physiological phenomenon of regulation, the autonomy of which we can today understand").

(b) Another striking, paradoxical phenomenon, running counter to the associationistic, behavioristic, tropistic and *Gestalt* theories is the mysterious breaking up and transformation of tissues in the metamorphosis of lepidoptera; we see, for instance, that the already specialized tissues of the caterpillar during the cocoon stage break down into an amorphous mass of protein, a noncellular mush or emulsion. The organization seems to have completely disappeared; then, after a few days, small discs of living cells appear, scattered at random throughout this emulsion, a new morphological frame manifests itself, and finally the porridge-like mush becomes reorganized in the form of the living butterfly. A similar phenomenon may be observed if one breaks into small fragments the Sponge *Clathrina*, which has a specific shape; the whole will slowly recompose itself and retake its primitive shape while continuing to live.

(c) The puzzle of coordinated simultaneity in mutations, the fact, for example, that the eye depends for its efficiency upon the simultaneous operation of many changes, each valueless by itself (as explicated by the English biologist Ch. Raven):

> The Darwinian theory that mutations arise fortuitously is not consistent with the sudden appearance of new types of structure and behavior involving the simultaneous ac-

> complishment of a number of separate but interdependent changes—a principle regulating this collaboration seems manifestly at work.

Concerning mutations in general, we must here mention Dr. Schrödinger's conclusion (in *What is Life?*) that spontaneous mutations are similar to the "quantic jumps" of electrons in intramolecular physics. The mutation would be caused by the absorption or emission by a certain gene of an electron or a wave-packet; but, as a quasi-teleological convergence of "useful" mutations appears in the evolution of living species, everything happens as if some or most of the mutations were not accidental but caused by an urge or instinct of the organism, a psychic action on the gene in which a "quantic jump" would cause the desired improvement.

If we consider now the purely mathematical aspect of the controversy, we may state that for a scientist the strongest argument against materialism is the fact (not very largely known so far) that there is a rigorous mathematical criterion differentiating organized, living systems from inorganic ones, proving what we may call the transcendency of life as compared to purely physico-chemical systems. It is the fact that whereas the Principle of Least Action controls rigorously the evolution of unorganized closed systems[2] (systems upon which no external force is acting), and would here allow the "Universal Brain of Laplace" to foresee their future at least on the macroscopic and atomic levels, organized systems containing life, like a culture of bacteria, violate this principle continually. This principle is represented in thermodynamics by the second law, law of the degradation of energy, or of the irreversible growing of entropy (the portion of the energy of a system which is transformed into low-grade energy); one of its more striking aspects is Boltzman's law: "A closed system (but not containing life) passes always from a less probable to a more probable state." Plants especially violate this law continually, and in photosynthesis build up in the most "improbable" manner out of low-grade materials enormous stocks of substances of a very high chemical and calorific potential (dextrose, etc.). This fact which, I repeat, is a mathematical test of the transcendency of life, and so far is known, understood, and appreciated only by the very few biologists who happen also to be mathematicians (like Sir D'Arcy Thompson, author of *Growth and Form*) is one of the most important steps taken since Plato in the development of philosophical thought.

---

[2] The importance of the principle of Least Action (and not as formerly believed, of the principle of Conservation of Energy) as the main controlling law for all unorganized closed systems, is now generally recognized by mathematicians and physicists. It is this principle, under its form of "Principle of Stationary Action," which enables Einstein to formulate in tensorial notation his principle of General Relativity, and which was later used by Louis de Broglie to write the basic equations of Wave Mechanics.

It is this same law of the Degradation of Energy which allowed Professor Whittaker to establish, as mentioned above, the necessity of an absolute beginning for our physical universe, even to calculate its approximate date in the past.[3] We must here observe that even in purely physical systems determinism does not hold on the subatomic level, owing to Heisenberg's principle of Indeterminacy or Incertitude, but this does not affect considerations on the molecular or atomic level. Let us also explain that the above-mentioned discovery (that the principle of Least Action does not apply rigorously to organized systems, that is, to life) does not mean that the physico-chemical laws are actually in abeyance in a closed system containing life, but that such a system does not behave any more as a closed system; that life acts, or can act, as an *external* force, even when its visible seat is contained within the spatial boundaries of the system, and this in the same manner that a force coming from the third dimension would be external when applied to a plane world, to *flatland*.[4]

Even on the purely physico-chemical level we might point out again that by the latest developments of intra-atomic physics, matter has not only become "dematerialized," but has been reduced to matrices or lattices of pure numbers, or even to "waves of knowledge." To quote Sir James Jeans:

---

[3] *The Beginning and the End of the World.* Oxford University Press, New York, 1942.

[4] Life would thus seem to act in the fourth (or fifth, if time is accepted as the fourth) dimension. The analogy of the successive shapes in the growth of living organisms to the successive intersections of a four-dimensional body moving through three-dimensional space, has been pointed out often.

> The fact that so much of what used to be thought to possess an objective physical existence now proves to consist only of subjective mental constructs, must surely be counted a pronounced step in the direction of mentalism.[5]

Let us now return to biology proper, and to the new theories which, producing what seems to be a satisfactory explanation for the puzzling phenomena of embryology, growth and evolution, and even for the seemingly "extra-dimensional" action of life, can be summed up under the name of "theory of autonomous living fields." An interesting fact is that, as already mentioned, this theory, foreshadowed by Speeman and Gurvich, has been formulated independently, and in a more complete form, in the United States and France, the last stronghold of the nineteenth-century school of mechanistic determinism.

To start with the American development, it has been first presented as a logically coordinated hypothesis by Dr. Gustaf Strömberg, the distinguished Swedish-born California astronomer and physicist, first in his book (to be reissued) *The Soul of the Universe*, in articles published in several scientific magazines, and now in a volume meant for the general public under the title *The Searchers*. Dr. Strömberg begins by observing that when we describe electricity and gravity, radiation and motion, dead and living matter, it is space-time structures, and nothing else, that we describe, but that whereas an electron (as particle) may be said to belong to the material world, electrical fields, radio waves and pilot waves belong to the immaterial one. We can say that particles (neutrons, positrons, electrons, photons, etc.) within the atom are cemented together into a unit by an immaterial wave-structure, with certain space and time properties, which in some way "organize" atoms, molecules, crystals and solid bodies in general. Dr. Strömberg postulates *a fortiori* guiding fields and guiding waves to explain structures and changes within the living world. The experiments of the Yale University School of Medicine have shown that an electromagnetic structure precedes and parallels precisely the organization and design of living things, "that this field, whose origin is as yet unknown, dominates the chemical and physical properties of the organism," that "measurements of potential even make possible prediction of future growth."[6] In the introduction by E. B. S., it is pointed out that:

---

[5] Cf. Jeans: *Physics and Philosophy*, pp. 195-204. Macmillan, N.Y., 1943.

> Thus the energetic takes precedence over the mechanical in the life-process, and it is obvious that the organism can no longer be considered merely the end result of the characteristics of its parts.

These electromagnetic fields and their structures, which are proved now to be present in all the manifestations of life and growth, are supposed by Dr. Strömberg to be the physical manifestation of "autonomous living fields" of still unknown character, belonging themselves to a nonphysical world, which through their electromagnetic projections (immaterial but physical) are able to control the biological phenomena visible in germination, embryology, growth, etc. (These physical electromagnetic fields are especially powerful in and around seeds and embryos.) There is no space here to outline more than a sketch of Dr. Strômberg's theory of living, organizing, fields; for him a living wave-system (which, coming from a nonphysical or at least extra-dimensional world, appears first in the ovum, as small as an absolute point, then develops its full size, then vanishes at death) can out of its impact on matter in colloidal form produce by resonance space-time frequencies and patterns similar to its own and in phase with them, and associated to the action of chemical hormones which have similarly absorbed, through the intermediary of the electromagnetic field, certain frequency patterns of the living wave-system; so that in a living organism there are in addition to neutrons, electrons, etc., immaterial "living sources" or foci which, when activated by hormones, interfere with the (physical) matter waves and tend to bring the two wave-systems into resonance. There is (in Dr. Strômberg's theory) a coordinated hierarchy between the special fields controlling the development and functioning of the different parts of each organism, the aggregate of those fields being itself controlled by a general field associated with that organism from the start.

---

[6] For more details about these experiments see the article by H. S. Burr, "Field Theory in Biology," *Scientific Monthly*, March, 1947. Reprinted in *Main Currents in Modern Thought*, October, 1947, with an introduction by E. B. Sellon.

Two striking applications of his hypothesis have been suggested by Dr. Strömberg: one to viruses, which he considers as gene-carrying substances lacking a superior, organizing, controlling center (although the proteins of the active virus molecules, or crystals, are still combined with the poles of action or "gene-spirits" to which the elementary fields are associated). A parallel trend of thought is suggested incidentally by the cancer problem. The second application concerns mimicry in insects, etc.; here field-poles or "gene-spirits," immaterial ova structures from dying leaf-cells, may move into the body of the pupa and be attached to the "immaterial structures" in the reproductive cells, causing the unexpected mutations and extraordinary analogical form and color patterns which characterize mimicry. This can, of course, be logically connected with Dr. Schrödinger's theory of mutations as quantic jumps within the gene from one energy level to another, whilst explaining up to a certain point the "favorable" direction of the mutation towards useful mimicry.

Dr. Strömberg postulates, as we have seen, that there is a world other than the world of space and time; the two worlds are not completely separated (the two worlds might be united in a world of higher dimension), but intersected at certain points, poles, foci or sources around which we observe wave-systems of different types, some contact-points being *immaterial*, sources for "living" wave-systems of different degrees of complexity. Some contact-points again are associated with certain nerve centers in our brain and are the roots of our consciousness and the source of our knowledge. The general, coordinating, living wave-structure, signals to the subordinate wave-systems or "gene-spirits" associated with different organs along structural channels observable as nerve-fibers. As just suggested about the brain center, there may be another living field distinct from the physiological one, working in the mental domains and corresponding to what is normally called mind-consciousness.

It is extremely interesting to see that a similar hypothesis about autonomous, organizing, living fields has been quite independently developed in France and presented in a remarkable book by M. Raymond Ruyer, entitled *Elements de Psycho-Biologie.*

Analyzing first the materialistic biological theories still at large, especially the mechanistic form of *Gestalt* theory, M. Ruyer shows that they are, as a rule, confusing a "balanced totality of forces" with "an organized system of forces" or "unifying domain of action" (or also "autonomous structure-forming activity"); he also observes that incidentally biological autonomy is ordered in time as much as in space which is not the case for the *Gestalt* which is only a balanced whole, not a being.

An adult fish is a hydrodynamic shape because it has been "prepared," not because it has been modified by the current of the water (a snowmound, molded by the wind, is not "prepared," is not a "being," is not a true form with expressed structure potential. True form is "thematic" and "significant"; one is reminded of Clive Bell's "Art creates significant form."). Even an amoeba which has no nervous system, acts sometimes like a beast of prey; the physiology of the nervous system is not the key to relations between psychism and life. The amoeba-structure is only an incomplete manifestation in space-time, the true amoeba is a "trans-spatial" reality. Organic memory takes possession of the fertilized ovum, is not the inherent property of the spatial ovum; organic memory is *trans-spatial.* And using spontaneously Dr. Strömberg's terms, M. Ruyer comes to the conclusion that: "A species of field directs the new structure-forming phenomena (in ovum, gastrula, embryo).

It is amusing to note that like all biologists of this new antimechanistic school, Ruyer avoids the words vitalism and entelechy, although he admits that Driesch is nearer the truth than the partisans of materialistic biology. In fact, although rigorously scientific in his examples and his deductions, he goes much farther than Driesch and Bergson (the Bergson of *L'Evolution Creatice*) in the direction of what the classic (we might say now the reactionary) school of biology would reprovingly call metaphysics; he considers for example that:

> Species is more than a category in the human mind, it is an autonomous idea, a distinct entity, very intelligent, very artistic [an archetype in fact]. [Also:] Species is in individuality more powerful but hierarchically inferior to the human personality. Species has no morality.

More surprisingly for a French biologist, a compatriot of Le Dantec and Rebaud, Ruyer, like Dr. Strömberg and Professor Whittaker, in following up his hierarchy of organizing entities coming from a trans-spatial world finds a transcendent starting point, a true cause, trans-rational but not irrational, which he is not afraid of calling simply God, "a line of individualities can be attached only to God."[7]

---

[7] *Soul of the Universe.*

Notes and Discussions

A LETTER TO THE "BANDIT EDITOR"

DEAR DR. FLEWELLING:

Or should I not say, rather, oh, you cynically frank imperialist bandit in the pay of Wall Street? It was a very good idea to print these excerpts from the address by Bychowskij. Nothing can give a more eloquent picture of what passes for philosophy in Russia. You may have seen my own comments, in a subsequent issue of *The Modern Review*, to the article by Dynnik. (Incidentally, the typesetter of my comments made a funny, but in a way a happy error, when, instead of my "ideological panaceas" he put in "ideological pancakes"!) I am afraid, however, that abuse is not something these people reserve for personalism, but is rather the only idea they have of what argument is. You probably have seen, on the last page of the *Journal of Philosophy* for March 31, the report of the accusations of "objectivism" against a recent Russian textbook of Logic.

Cordially yours,

Brown University — C. J. DUCASSE

ANNOUNCEMENT

The privately endowed David F. Swenson-Kierkegaard Memorial Fund is making available for 1949-50 and every year thereafter a fellowship of at least five hundred dollars to be used for the study of Soren A. Kierkegaard, 1813-1855. Persons of any creed, nationality, or color are eligible. Each recipient is free to choose his own place of study. In view of the character of the subject matter, a religious interest and a reading knowledge of Danish are requisite. Anyone seeking application blanks or information is urged to write the Secretary of the Swenson-Kierkegaard Memorial Committee, Dr. Paul L. Holmer, Department of Philosophy, 300 Folwell Hall, University of Minnesota, Minneapolis, 14, Minn.

Along the Bookshelf

THE NEW LOOK IN SCIENCE, AND THE OLD

THE ROAD TO REASON. By *Lecomte du Noüy*. Tr. and ed. by *Mary Lecomte du Noüy*. Longmans, Green & Co., New York, 1948. Pp. 254. $3.50.

For the hundreds of thousands of readers of the late Lecomte du Noüy's *Human Destiny* this book, now translated by Mary Lecomte du Noüy, will provide more detailed explanation of the former work written more particularly for the general public. Those who were moved by the novelty of positions taken in *Human Destiny* will want to read *The Road to Reason.* First published in France under the title *L'Homme devant la Science*, it shows us the foundations on which *Human Destiny* was laid. However much belated scientists may deprecate Du Noüy and his work, there can be no doubt that he struck a body blow at scientific materialism. As soon as the Russians get wind of this book we may look for an outpouring of venom for its disagreement scientifically with Marx and Lenin, for materialistic science finds itself today surely ensconced with strange and unwelcome bedfellows. Both it and its bedfellows strangely survive not by gift of science but by most obstinately held dogma—dogma against light.

So provincial and self-centered have the lesser scientists become through "specialization" that they have lost the capacity to view their specialties in their larger but essential relationships. This narrowness has been fostered by a contempt for philosophy and for the intuitional realities accompanying what is known as religion, as well as a disregard for everything outside a very narrow field. This type of science which someone has aptly termed "Victorian," is now met head-on by discoveries made within the last quarter century. The advent of quantum mechanics introduces a whole new problem of what is meant by objectivity.

> It can therefore be stated that there would be no scientific fact (1) if the receiving instrument—man—had not been in the path of certain radiations or fields of force, (2) if this receiver had been a unique example of its kind, and (3) if the other identical receivers had been incapable of communicating with each other and of comparing their reactions.
>
> This simple observation clearly defines the respective positions of man and his universe. . . . Thus, it is impossible to conceive a scientific fact, or a phenomenon, without the presence of man. (27-28)

In such manner is the age of materialism seen to die, and in such fashion does the age of personalism take the stage, for whatever identity may exist in an atomic world is within the person, human or Divine. If our materialistic friend objects to such "subjectivity" as removing the reality of the universe we need only to remind him that he himself has already acknowledged the subjective character of reality by "demonstrating the granular nature of the universe" in contradiction to our senses and our common sense.

> Without man, the universe has neither shape nor color, just as in the absence of a tuned receiving set, a broadcast of Beethoven's greatest symphony fades into space unheard, without raising an echo outside the room in which it is played. . . . In relation to the evolution of the universe, birth is not a beginning, and death is not an end. There are no more isolated phenomena in nature than there are isolated notes in a melody. (53)

If we attempt to refer everything to statistical averages, the presence of contingency with laws based on the large number of cases, we are in no better case.

> . . . only two possibilities exist: either there is order or there is disorder. If disorder prevails, then our statistical laws are comprehensible, but the notion of cause disappears, and the evolution of organized beings, and of man, becomes incomprehensible. If it is not completely disordered, then either privileged particles must exist that are entrusted with the coordination and obey laws that will always escape us, or there must be unknown coordinating forces, obeying a plan that we can only perceive by its macroscopic result. In this case there would be a first cause, and then one does not understand how pure statistical laws, which are based on chance alone, can explain the universe. . . .
>
> * * *
>
> We can never escape the following simple fact: everything takes place as if, under certain circumstances, the march of events could be influenced by a personality, through means that seem to escape the laws of large numbers and that cannot be detected by our instruments. On the other hand, the law of large numbers can never take individual personalities into account. (74-75)

The problem posed by the law of entropy drives us farther along the line toward a personalistic interpretation of the universe. Every use of energy, a lighted match, a puff of steam, an explosion of gas in an automobile inevitably destroys the total of energy of the universe, "degrades, irreversibly, part of the thermic capital of the world." (106) So true is this that contemporary scientists have been able to fix the age of the earth by the present state of energy. The present state of energy, its degree of entropy is "the signpost for time in the physical world." (107) When complete entropy arrives all will be homogeneity, symmetry, isotropy; nothing will be distinguishable from anything else. "The universe appears to us the way it does only because of the infinite number of dissymmetries." Perfect order must have reigned at the beginning of things, the chaos, without form and void, of all religions.

In direct contrast to the exhaustion apparent in the physical world is the increasing energy introduced by mind. If personality followed the fate of the physical universe, there would be a continuous impoverishment of the ego, whereas it grows greater with every experience.

Du Noüy's discussion on the nature of the cell is illuminating and takes place in the field in which his pre-eminence cannot be questioned. He shows how impossible it is to consider the appearance of life by chance. The very calculus of possibilities rules it out and the theory of chance holds sway only through incorrigible dogma and unscientific assertion. He illustrates this through an incident at the College de France, where an objecting colleague who knew nothing of the cell asserted: "I will never believe there can be systems to which the second principle (entropy) does not apply." (120) When asked for scientific facts he replied by a profession of faith.

> Curiously enough, when it is a question of atomic structure, or of the nature of the electron, positron, proton, neutron, and other elementary particles, the scientist does not hesitate to confess his ignorance. The fact that these particles are, for the moment, no longer considered even as material entities but as waves of probability, does not trouble him. He does not pretend to know or to understand. He only pretends to seek. That is the scientific attitude.
>
> But as soon as we pass into the domain of life, this same physicist, who is imbued with modesty concerning the things he does know, is full of assurance and pride concerning the things he does not know. His purely sentimental convictions smother his critical sense. Faith kills good faith. In this he follows the directives of a small number of biologists whose important studies have probably prevented them from thinking. (141)

There is grave temptation to persist still further in quotation, the statements are so strikingly original, the diction is so superior to that of the reviewer, but this book throws down a challenge which materialism can ignore only at its peril. As is usual in such cases, the dogmatist of materialism will attack this outstanding biologist not with scientific fact but with what might be called a sort of "theological" innuendo as not according with scientific orthodoxy and reeking of philosophy and religion, with which last two disciplines Du Noüy was acquainted as well as with biology and biochemistry.

There exists still another work by Du Noüy, untranslated from the French, *L'Avenir de L'Esprit* (*The Future of the Spirit*), which carries on from the point of this work and the publication of which in English is, it seems to us, mandatory. The task of translation could be in no better hands than those of Mrs. Du Noüy who has shown in this present instance, not only lingual expertness but also a keen judgment in the excision of possible irrelevancies and has improved the original by placing exceedingly relevant footnotes in the body of the text.

R. T. F.

ORGANIC FORM AND RELATED BIOLOGICAL PROBLEMS. By *Samuel J. Holmes*. University of California Press, Berkeley, 1948. Pp. vii-169. $5.00.

Professor Holmes, honored veteran of the scientific staff of the University of California, in a work *Organic Form and Related Biological Problems* provides us with what may be considered the deliberate residue of a lifetime of scientific thinking. However, one will find in it nothing new, while the progressive thought of the great scientific leaders of the last decade such as Sherrington, Punnett, Jeans, Driesch, Eddington in England, Guye of Geneva, and Max Planck, goes unnoticed. The addition of the French biophysicists Pasteur, Du Noüy, Cuenot, Colin, Rouvière, Dalo, Leemhandt, and the Americans Millikan, W. F. G. Swann, E. C. Kemble, Berman, Slater, and the Comptons, to mention only a few, shows how belated our author is in upholding the discarded materialism of yesterday. All these and more, a roll call of whom sounds like a Nobel Prize list in science, he lightly dismisses as "vitalists," and, therefore, more or less outside the pale of genuine science. There are the same old arguments for mechanism in which teleological results *must* be produced by chance with no appreciation of the logical impasse thus produced. The matter would not be serious were it not a fact that the average run of youngsters being graduated into the scientific field have absorbed this outmoded view and dish it out to another generation in a smart-aleck assault on moral and spiritual reality as if the view were a recent discovery. It takes years for this kind of dogmatism to die. Nevertheless it is on the wane.

R. T. F.

BIOSYNTHESIS. By *Francis J. Mott.* David McKay Company, Philadelphia, 1948. Pp. xxii-340. $10.00.

This book is said to be "The exposition of a Religion that needs no faith; of a science that is without materialism; of a psychology devoid of guesswork." These paradoxical, if not contradictory claims, are a fair index of the type of work this is: pseudoscience, belonging to the speculative fringe of psychoanalytic "theory."

In the opinion of the reviewer, this book does not merit being dignified by being reviewed in a journal devoted to serious scholarship. However, the space taken by the following two random quotations may be justified, if they help serve as a warning to serious students: (1) ". . . the conventional attitude of prayer adopted by Christians is simply an effort to recapture the fetal position whilst in the body of the mother church" (fn. 145); and (2) ". . . there is not only a configurational link, but also probably a direct link between maleness and positive electricity, and between femaleness and negative electricity." (fn. 150)

GEORGE WATSON

WHITEHEAD'S PHILOSOPHY OF TIME. By *William W. Hammerschmidt.* Columbia University Press, New York, 1947. Pp. ix-108. $2.00.

This little book *Whitehead's Philosophy of Time* seeks to collate and arrange in logical order the basic concepts of Whitehead implied by space-time. It is confined to that phase of Whitehead's work, which in the opinion of the author, represents his greatest ability and most finished achievement, namely, his theory of process taken in its spatio-temporal aspects. The three periods into which the work of Whitehead is divided are marked by a certain progress in the development of his concept of creative advance of nature. The first period extends from his earliest publication through 1924, in which the term used for creative advance of nature is "passage." In the transitional period he uses the term "conformation." This period extends from 1926 to 1929. The publication of *Process and Reality* in 1929 introduces the last period in which the term "process" is adopted.

Each chapter contains a summary of the argument and the book is supplied with a glossary of terms. A selected bibliography is appended.

HERBERT L. SEARLES

THE NEW SCIENCE OF GIAMBATTISTA VICO. Tr. from the third edition (1744) by *Thomas G. Bergin* and *Max H. Frisch*. Cornell University Press, Ithaca, 1948. Pp. xv-398. $5.00.

This able and attractive translation of Vico's major work *Scienza nuova*, which originally appeared in 1725, is a noteworthy contribution to a much-merited Vico revival. In 1944 these translators made available Vico's *Autobiography*. Much earlier (1911-1916) Fausto Nicolini published a collation of the *New Science*, the basis for the present translation. Croce's *Bibliografia vichiana* was enlarged and rewritten by Nicolini in 1947; the latter writer also published a definitive commentary in 1948.

This is not the first revival of Vico. Italian scholars praised his work in the post-Napoleonic period and many of the European romanticists made his acquaintance during the nineteenth century. Croce and Nicolini, along with these American translators, have added their efforts in the present century.

Vico, who died in 1744, was in strong opposition to the prevailing rationalism of his day and was, therefore, neglected. The tide of optimistic evolutionism of the nineteenth century likewise obscured him. His lack of contemporaneity has hidden his novelty and his historic value. Vico was one of the first scholars to apply inductive methods to the study of source materials—in his case, literary and historical—in the quest for cultural origins and continuities. Impressed by the cyclical and recurrent patterns in cultural development, he was also a functionalist in the reconstruction of social origins. Naive in terms of present-day scholarship, he nevertheless deserves far more recognition than he has received for his anticipation of nineteenth-century Comtean positivism and for his emphasis on the scientific uses of literary and historical documents. Inheritor of humanist Renaissance traditions, his approach to the study of human society was integrative and original. The *New Science* of this Neapolitan rhetoric teacher, who was both poet and prophet, rightfully belongs, as translators Bergin and Frisch have understood, to the great community of scholars interested in folklore, literature, and the history of ideas and methods.

The present translation is a very readable presentation of Vico's methods and materials. Organized in major "books," the *New Science* first establishes its "principles," and then in strict logical form deduces and illustrates their interpretive uses in the understanding of cultural origins and the major modes of cultural life, including the sciences and humanities. The course of nations was found by Vico to follow patterns indicated in his logic, which was an early approximation of modern hypothetico-deduction.

University of Nebraska PAUL MEADOWS

IDEAS AND HISTORY

THE BASIS AND STRUCTURE OF KNOWLEDGE. By *W. H. Werkmeister*. Harper & Bros., New York, 1948. Pp. xi-451. $5.00.

Here is a volume that fills a long-felt need of a comprehensive survey of the philosophy of science that provides at the same time an outline of specific recent developments in the fields of logic, mathematics and scientific cosmology. The advance in these fields has been so enormous that only the specialist has been able to keep up with it; while students in general, including experts in other phases of philosophy, have been forced to grab as best they can, with the unfortunate outcome that they have been inclined to become uncritical advocates of the viewpoint that is most voluble or nearest at hand. Professor Werkmeister's book is an excellent, comprehensive summary of these developments now made accessible to a wider public. The ground covered within the confines of a textbook is rather extraordinary. A second, and no less important, contribution of this work is a philosophy of science that explicitly opposes the realistic and positivistic traditions that have become increasingly popular during this century. In spite of the easy accessibility of the writings of other schools, for instance, Whitehead, C. I. Lewis, and B. Blanchard, there is abroad a supposition that Bertrand Russell has said the last word on the philosophy of mathematics, that logic is exclusively existential, and that the logical positivists have succeeded in eliminating the significance of the "spiritual" world. Werkmeister's volume serves happily to correct this myth.

The author's standpoint is characterized broadly and rather loosely, as "Kantian." It could equally well be called Cartesian or perhaps more properly, personalistic.

Scientific knowledge is identified with a realm of "warranted belief." Belief as warranted is not only the product of the synthetic act of a knower, but it depends ultimately on "first person experience." The self thus stands at the center of the knowing enterprise. Knowledge is not automatic or self-imposed; on the contrary, it is inseparable from signs and concepts that are universals. Real logic and its product are intensional, not extensional. Werkmeister, in fact, rejects the adequacy of all logistic apparatus as substitutes for real logic. (Incidentally, in listing Lewis' system of strict implication as extensional, he fails to point out that it is an attempt at approximating an intensional logic as closely as possible within logistic limitations.) Pragmatism is also rejected, on the basis of the contention that it overlooks the polar character of knowledge which involves an identification of knowledge with systematic coherence with other ideas as well as empirical verification. (The argument, I think, bears down too heavily on sporadic rather than central pragmatic doctrine, since the gist of James's claim was simply the hypothetical character of scientific knowledge, not the absence of systematic coherence. Pragmatism, after all, took its rise in Kant, even though it rejoined Berkeley, Hume and Darwin. The viewpoint is Kantian also in its doctrine of the intent of scientific knowledge:

> The concepts of science do not designate metaphysical "entities"; they are not "tags" identifying "things," but "constructs" making possible that specific kind of integration of first-person experience which we call "scientific." (376)

It is equally Kantian in its fundamental distinction between mind and its content:

> As the center of reference for all first-person experience, "mind" is not a content of its own experience but, being the focal point of "awareness," stands in irreducible contrast to that content. In this sense, "mind" is that for which everything else is content; and the laws of the natural sciences, therefore, dealing only with content and the interrelations of content of experience, are and remain forever inapplicable to "mind" itself. . . . Any science, therefore, which is concerned with the characteristic features of "mind" as they are revealed in the "modes" of experience deals with a subject matter which is not in the same universe of discourse with the content of the natural sciences. Hence, to the extent to which psychology is concerned with "mind" in the sense here defined, it indicates a new dimension of investigation and can never be included in the integrated and "closed" system of the natural sciences. The categories of the "external" world, and the principles and "laws" which integrate the *content* of experience are not of the type required for the understanding of the "*modes*" *of experiencing*. . . . Only the broader and specifically different approach of a general ontology, taking into consideration social living, art, morals, and religion, may yet preserve a semblance of the proud ideal of an integrated "closed" system. (415, 418)

Mind, and with it the dignity of man, then, is not devoured by its own scientific alimentary system. Perhaps another quotation in this connection will be justified:

> If we add to the evidence of historiography the evidence available in other fields—such as philosophy, literature, and the arts—in which value judgments and value scales play a predominant role, the conclusion is inescapable that scientific knowledge—important as it is—is only a part of the story and not the whole. Unless we keep this fact constantly in mind, we are in danger of losing our proper perspective with respect to the sciences and of falling victim to an in-

> sidious "scientism" which would ultimately destroy the foundations of science itself. The moral and social obligations to which scientists must and do submit transcend the realm of empirical research to find their justification and sanction, not in laboratories and scientific methods, but in a realm of values—human and humanitarian—which can neither be scientifically analyzed nor reduced to functional equations. Scientists could create the atomic bomb, but political action which is responsive to the moral consciousness of the world must prescribe the future uses of atomic energy. And thus must science become in fact what it has always been in principle: the servant of an enlightened humanity. (331f.)

It is impossible to survey this volume in detail. In such a thorny and debatable realm it is scarcely to be expected that the opinions of the author should go unchallenged. To a considerable public, however, the book will be highly welcome as providing a scholarly protest against the impersonalism and value-materialism that currently goes by the name of realism and positivism. Only one question arises: whether the writing is so rich in content as to be beyond the capacity of the classroom student. In this matter, however, only experience can give the answer.

WILBUR LONG

ESSAYS IN THE HISTORY OF IDEAS. By *Arthur O. Lovejoy*. Johns Hopkins Press, Baltimore, 1948. Pp. xvii-359. $5.00.

The history of ideas as well as speculative systems, tends to become stereotyped by an habituating process of intellectual *mortmain*. Partial truths and wrong perspectives, handed down from the past, find their way into the conventional thought of later times; and in consequence historical error is perpetuated. Thus Locke is pigeonholed among the educational formalists; Kant is classified as an epistemologist, and the eighteenth century is called an "age of reason." Fresh interpretations are needed to implement and reappraise the old; in this consists the chief task of historical study. Particularly in an age of specialization and intensive division of labor is it difficult to read history accurately. We forget that in former times the human mind was not so compartmentalized; collateral influences ran in all directions among science, speculative philosophy, religion, theology, political and practical affairs, and the arts.

In this country Professor Lovejoy has served as a pioneer and outstanding representative of the newer principle of historiography; and his influence and example have provided the stimulus for a wide variety of scholarly research from the newer point of view. The present volume is a collection of sixteen historical essays written by him, and for the most part, previously published in technical journals. It was authorized by the History of Ideas Club of Johns Hopkins University in anticipation of the twenty-fifth anniversary of its founding by him. "Ideas," as Lovejoy puts it, "are commodities which enter into interstate commerce." (3) Consequently historical investigation now "manifests itself as a demand for more historical synthesis—for the establishment of concrete and fruitful interconnections at a large number of specifiable points." (6) Therefore, "there is imperative need of more definite, responsible, organized collaboration between specialists in these several branches than has hitherto been customary. . . . Trustworthy historical synthesis is not a one-man job." (10) The chief interest of the author is that of the influence of philosophic ideas on other phases of man's intellectual life; and this volume is a specific illustration of the need and possibilities of this field of research. No doubt he would agree that the opposite need is also imperative, namely, of showing how other fields of life have influenced the history of speculation.

It is impossible to examine in detail the essays included in this volume. Although they range from "The Communism of St. Ambrose" and "'Nature' as Norm in Tertullian" to "Coleridge and Kant's Two Worlds," they are largely confined to topics dealing with eighteenth- and early nineteenth-century thought. A very illuminating discussion is included on "The Chinese Origin of a Romanticism." All of the studies embody the traditional analytic precision for which Lovejoy is widely recognized, and they will be found useful both in specific information and as illustrations of the author's central thesis concerning the importance of comparative and collaborative historical exploration. An appended bibliography of Lovejoy's published writings will be of interest to the specialist.

W. L.

THE MEANING OF HUMAN HISTORY. By *Morris R. Cohen.* Open Court Publishing Company, Lasalle, Illinois, 1947. Pp. ix-304. $4.00.

Although our age is exceptional in its role of history making, it is scarcely historical in outlook. Our horizons are no doubt slightly futuristic in a concern about the next depression, the uses of atomic energy, and the next move by Russia; but the trend of thought is indicated by the current tendency of philosophy to revert to the outlook of the seventeenth century which took mathematics as its model of method and physics as its subject matter. In choosing the subject of his Paul Carus Lectures, now printed posthumously under the title *The Meaning of Human History*, Professor Cohen no doubt had some such notion in mind. As he observes in the opening sentence of the volume, "The philosophy of history is certainly the most neglected province of philosophy." It is perhaps not an accident that Professor Cohen, like Bergson who has done more than anyone else to make us time-conscious, was reared in a Semitic tradition. The philosophy of history, as the writer reminds us, is traceable to the influence of the Bible upon Western thought. The content of this work can best be summarized by enumerating its chapter titles: The Task of the Historian, Metaphysics and History, Importance and Possibility in History, The Linkage of Human Events, The Geographic Factor in History, The Biologic Element in History, Great Men in History, The Institutional Approach to History, Patterns of Historic Development, and The Tragic View of History. As could have been anticipated, the author provides us with no simple *a priori* formula. On the contrary, we are warned against the ever-recurring error in philosophy of history, that of hasty generalization and un-due simplicity. Simple one-factor explanations of history confuse necessary and sufficient conditions; only a clear recognition of the "multidimensionality of history" gives us a proper perspective.

> Various theodicies, systems of evolution, and physical, political, economic, or other interpretations of history have all tried to make the endlessly complicated web of history conform to a pattern based on some happy guess. (87)

This does not make them useless; it means simply that we must not take them too seriously. In contrast to linear views of history it is suggested that

> the idea of polarity and oscillation between opposite poles has a good deal more to contribute to historiography than the notions of perpetual progress or perpetual degeneration. . . . Oscillations in the direction of total freedom and in the direction of total regimentation may be inevitable. . . . It may well be that today we stand at one of the turning points of history, and that the power of freedom, the adventurous spirit which makes the growth of civilization possible, has reached a natural limit of expansion. (273f.)

If we must abandon "the jaunty and atrociously optimistic belief in the inevitability of progress," the author warns us likewise that we must not discount the importance of moral factors in history. Rather, "we cannot formulate an intelligible account of human history without the use of ethical categories and viewpoints." In sum, we must pronounce unrealistic and limited "all interpretations of history—be they physical, biologic, economic or even theological—which minimize the purely ethical or moral element." (277) Referring to the naturalistic outlook represented by such thinkers as Marx, Nietzsche, and Durkheim, the author observes that "all interpretations of human events which profess to exclude ethics actually smuggle in uncritical ethical judgments." (287) In contrast to the dominant tradition in the philosophy of history that offers us what is startling, flamboyant or sensational, the author's tone is measured, judicious, sober, and critical. The reader, in fact, will be impressed with a simplicity and clarity of expression that eschews ostentatious claptrap and avoids a ponderous parade of details. His humility of style, as it might be called, his freedom from pontifical and technical phraseology, is refreshing in an age that seems to believe that what is important and profound must be linked to an undecipherable terminology. Indeed, it may deceive the unwary into discounting the rich wisdom and scholarly background from which the volume has sprung. It is unfortunate that the author did not live to see his work in print. W. L.

THE ABUSE OF LEARNING, THE FAILURE OF THE GERMAN UNIVERSITY. By *Frederic Lilge.* The Macmillan Company, New York, 1948. Pp. 184. $2.75.

Thomas Mann has already pointed out in general the failure of the intellectuals of Germany to perceive the significance of the rise of Hitler and take appropriate action in time. Professor Lilge is the first to give an objective and detailed analysis of the historic development which led to the surrender of the German universities to Hitler and the Nazi state. He begins with the general sterility of the eighteenth century and the brief flowering of German humanism wherein both Humboldt and Goethe proclaimed the cultivation of human individuality as the supreme aim of education. The decline of liberal education grew out of the opposition of empiricism to this view and also out of certain inherent weaknesses in the movement itself among which were the overidealization of the culture of Greece and the narrowness of its outlook. In the early nineteenth century, idealism rather than humanism was characteristic of Germany and Fichte held that the socialization of the individual should take place in a unified system of national state schools. He held further that free rational criticism and the search for inclusive and universal truth are the main objectives of a university. Although the German idealists made positive contributions, they were too dogmatic in their defense of deductive reasoning and their partiality to dialectic reasoning as against scientific method and the use of empirical evidence.

Modern experimental science in Germany was initiated about 1822. The concept of science came to dominate the whole conception of the university, with certain shortcomings which Lilge points out, particularly in the ideas of Helmholtz. The university

> troubles one by its virtual evasion of all problems of education. One is persuaded to believe that education, somehow and somewhere, *accrues* while knowledge is being gathered. Education, so to speak, *happens* to a student. . . . To participate in the collective enterprise of laboratory research . . . is to submit to a kind of moral and mental discipline. (72) To the early Idealists and humanists, education had meant the achievement of individual judgment, breadth of knowledge, balance of interests, and that awareness of self in relation to others which is the condition of responsible action. . . . Now this tradition came to an end in the scientists' conception of a university. . . . This was a frank renunciation of the individual's quest for a rational and responsible order embracing his *whole* life. (74)

Helmholtz, by disregarding the moral life and its purposes, paved the way for a heedless preoccupation with technology and the catastrophe of German culture. The parallel growth of German nationalism to that of German science suggests the ominous character of the situation. The universities became research centers and teaching was incidental, while the professors of science as well as, a little later, the professors of the humanities, became absorbed in the task of accumulating knowledge. This point of view was admired and eventually imitated by the outside world, and especially by the United States, whose scholars did not see the human void beneath the hustling productivity. The relationship between this point of view and the collapse of the German universities and their submission to Hitler is still not seen by many.

The educational criticism of Nietzsche and others was directed against the dehumanization of education and its reduction to a branch of technology wherein the world of fact and that of value are not distinguished, and the human person is reduced to a determined mechanism. Those who collect, discover, and record specific information are deemed superior to those who create, reflect, and educate. Education is confused with accumulation and mastery of ever greater amounts of subject matter while "objectivity" becomes a cloak to cover the inability of scholars to distinguish between things of greater and things of lesser importance. Nietzsche soon lost the hope, however, of revitalizing German education and decided that new institutions and values must be created. Late in the nineteenth century and in the early years of the twentieth century the ideas of Nietsche, not very well understood, became in a way the support of opposing forces. All caught his spirit of rebellion and cynicism, however, and destructive criticism and romantic excitement came to triumph over serious reform. In fact, irrationalism became the current which carried along such writers as Langbehn and Spengler, the latter of whom did much to create the popular and fatal mood which was favorable to the development of the Nazi movement and its version of the history of Western civilization. Others contributed to anti-liberalism and anti-rationalism among the German intellectuals even though from a different angle of approach: Bergson, Tolstoy, Kierkegaard, Heidegger, and others. There were not wanting, however, those who, like Max Weber and Scheler, attempted to harmonize conflicting elements into a new educational synthesis without immediate effect but prophetic, perhaps.

The universities had ample and direct warning in the violence and unrest provoked by Nazi students years before Hitler was made chancellor.

> There was time to prepare for military resistance against political violations of academic freedom. The customary meetings of academic societies were occasions at which declarations of the solidarity of intellectuals might have been drawn up and a general alarm given, . . . but the critical moment passed without any action. (163)

Immediately upon Hitler's accession, the Technical School of Stuttgart granted him an honorary degree, which he spurned, however, and the University of Bonn struck the name of Thomas Mann from its list of honorary doctors. The descent from then on was rapid. Doubtless the majority of German professors were troubled, but the fact is that on the whole they acquiesced in the developments. German scholarship and science capitulated to Hitler and the Nazi state and failed to oppose the destruction of the democratic state.

Professor Lilge leaves the reader to draw his own parallels from his detailed and closely reasoned analysis, but the suggestions are very powerful ones. On the one hand, in the United States, one sees in the universities the sterile cultivation of "pure science," "pure art," a private and personal "culture," with their disregard of human values and responsibilities, and on the other, in our community life, the hysterical fear and unrest typified by the current "witch hunts," "heresy trials," and "loyalty inquisitions," which present such striking similarities to the German course of development that no educator, on the higher levels particularly, can afford to overlook them.

M. M. Thompson

Philosophy of Life. By *Chen Li-Fu.* Philosophical Library, New York, 1948. Pp. 148. $3.00.

Aside from offering a restatement of the humanistic wisdom of the Chinese classical tradition (Confucian and Taoist), this book has only academic interest. The author is a pure Sinophile who attempts in the twentieth century to give us a metaphysics and ethics based exclusively on the ancient Chinese classics, particularly the *I Ching.* The whole prescientific tradition is here: the naturalistic divine life-principle, the Yin and Yang, the five elements (*hsing*), the up-and-down movement of chemical transformation, the trigrams and hexagrams, the six directions, the five social relations, the man-centered universe, and the principle of power-conservation. The author's attitude to ancient Chinese mythology is purely unscientific, a matter of some interest in light of the fact that he received an engineering degree from an American university. This volume serves chiefly to offer insight into the modern Chinese tradition given definitive formulation in neo-Confucianism. It is also revealing as an authoritative statement of the outlook and policies of the conservative wing of the Nationalist government, since its author was formerly minister of education and of social administration, was vice-president of the Legislative Yuan, and was one of the most influential leaders in the Kuomintang. Credit is due Professor Jen Tai, dean of faculty and students in the National Kweichow University, for undertaking the very difficult job of translation.

W. L.

The Tyranny of Time. By *Chalinder Allen.* Philosophical Library, New York, 1947. Pp. xii-275. $3.00.

The Tyranny of Time has as its subtitle *An Introduction to Atomic Energy*, and contains a mass of factual textbook material in physics and chemistry and a wealth of somewhat fantastic speculative hypothesis in fields as disparate as atomic theory, philosophy of history, and psychology. Furthermore, the aim of the author is somewhat obscure as between a popular essay on Time interpreted as a tyrant against which man in the exercise of thought-energy is eternally in conflict, and a high speculative philosophical work proposing hypotheses with some semblance of plausibility.

The author is first concerned to show that Time is not real but that we have endowed it with concrete reality, and as a result are suffering under the delusion that it has power over us which in our culture we are trying to overcome with increasing work and speed. All things are "wavicles" of space or energy expressed in various forms which are the things of our ordinary experience. Man is placed at the top of the scale of matter and the simplest chemical element at the bottom. Man is capable of thought-energy and by means of it is overcoming grav-time. Time and gravitation are combined under the symbol of grav-time, the fourth dimension, which means both gravitational energy and its effect, our idea of Time. Whenever energy does work, it is in resistance to grav-time. Thought-energy is the only ultimate controlling force that really opposes and temporarily subdues time and gravitation, the tyrant.

In conclusion we are confronted with the following alternatives. Either we may seek to eradicate the temporal illusion by applying thought-energy and giving our attention to being rather than doing, or we may seek scientifically to overcome time by subduing his omnipresent instrument, heat energy, by means of work.

H. L. S.

INTERPRETATIONS OF RELIGION

Ancient Egyptian Religion: An Interpretation. By *H. Frankfort.* Columbia University Press, New York, 1948. Pp. x-172. $3.00.

The case of Egyptian religion is expressed by Professor Frankfort in a single sentence of the preface: "The Egyptian held that he lived in a changeless world." (vii) Having approached his subject from five different directions, as he says, the result as summed up in his last sentence that the foregoing expresses "with unanswerable finality, the ancient Egyptian's conviction that his universe was a world without change." (156) This might, with almost equal truth, be affirmed of Orientalism in general, and throws a flood of light on the serious division made in present-day society between Orient and Occident.

If we seek the initial impulse of this division, it might be discovered in the dictum of the Greek Heraclitus, the least-understood man of his age, who declared that the supreme reality was change. On this foundation were built the later systems which eventuated in the atom concepts of our own time.

The idea of changelessness led the Egyptian to pose a nature religion with many gods rather than one, and an animal world itself divine because it partook of common sources like himself. The head of the state was known as a Pharaoh rather than as an individual and was content to let his "individuality merge with the impersonal portrait of the ideal ruler." The brief heresy of Akhenaten, revived by Tutankhamen was the only exception to the rule, by fostering the monotheistic concept of God. The same thought of permanence is illustrated in Egyptian teachings concerning a way of life. Contrary to those who read with an evolutionary bias, our author holds that these ethical teachings exhibit no significant changes in three thousand years.

The Egyptian hope was the reunion of his vital force with that of nature. Death meant a change in man's personality, not his annihilation, and this was the basis of their belief in immortality and of their preoccupation with death. Apparently as long as a man's body survived so long would his vital life-force or soul, though separated from it, continue in existence.

The final approach of our author is that through literature in which he draws a striking distinction between their usage and ours. In Egyptian poetry the concept of change is wanting.

> The difference between our usage and that of the Egyptians is most revealing. A refrain may be an epitome, in which case the stanzas appear as variations on a theme. But a poem with a refrain may amount to a statement that, whatever the circumstances which the stanzas describe, there is no change. In other words, such poems are based on an *expectation* of change. The Egyptian poems, starting each stanza with the same line, exclude from the very first the possibility of change. (141)

The pyramids are the final expression of this idea of permanence.

> We must remember that they were originally cased from tip to base with smooth stones of which even the joints were next to invisible. Thus these symbols of the place where all life had originated were free from every particularization which would call up the thought of an alternative—and hence of transcience. They are beyond change.
>
> The pyramids cannot be compared with any other type of structure. They are completely inaccessible. (156)

What might be called the irony of time is the fact that these stones so carefully wrought and sutured to withstand all attacks of weather or man, their enclosed tombs shut off from discovery and the workmen slaughtered to conceal forever their secrets, by their present condition make a mockery of this ancient dream of permanence.

Professor Frankfort gives us a clear and interesting account which will be welcomed for its brevity and its keen analysis, where the subject is too often made obscure and unintelligible. Our one serious question is about the statement that "the Egyptians viewed his misdeeds not as sins, but as aberrations." (73) The accounts of the *Book of the Dead* where the soul of the deceased is measured to a feather-weight, and the stone scarab is inscribed with the virtues of his heart, so carefully scanned, seem somewhat to emphasize the presence of sin rather than that aberration. R. T. F.

PHILO, FOUNDATIONS OF RELIGIOUS PHILOSOPHY IN JUDAISM, CHRISTIANITY, AND ISLAM. By *Harry Austryn Wolfson.* Harvard University Press, Cambridge, 1947. Vol. I, pp. xvi-462; Vol. II, pp. xiv-531. $10.00.

The proper understanding of any system of thought calls for a knowledge of its antecedents. Christian theology is such a system, though to the average layman and to many a cleric it sprang like Juno from the mind of Jove full-fledged to life from the Scripture itself. Small attention has been given to the mixed parentage of modern theology, deriving as it does from Greek, Jewish, and profoundly influenced from Parsee, and even Moslem sources. In an effort to follow this development to modern times, Professor Wolfson has inaugurated a series of volumes under the general title *Structure and Growth of Philosophic Systems from Plato to Spinoza.* The second of these works is a two-volume work entitled *Philo.* Of all the dominating influences on early Christian interpretation, Philo is perhaps the most important. Though he is sometimes disparaged as a philosopher of minor importance, yet that judgment is hardly consonant with the fact that he has influenced the mainstream of Western thought for seventeen centuries.

Philo taught and thought in what was in his time the maelstrom of religious ideas, the schools of Alexandria. Here were gathered under the peace of the Roman Empire all the cults, isms, philosophies of the age, the conflicting ideologies of East and West. That stirring account of Pentecost representing the presence of Parthians, Medes, Elamites, and dwellers in Mesopotamia was perhaps no overdrawn description, for the world of that time was agog with new and confusing ideas, liquid and prepared for crystallization. This was the period in Judaic history of the writing of *The Wisdom of Solomon*, recently so beautifully translated by Edgar James Goodspeed, for the Apocrypha in which the Jewish author attacks in immortally poetic lines the cynical atheism of the Epicureans. If it be true that he had in mind the persecutions of Julius Tiberius Alexander, the renegade Jew whose treachery had made him the prefect of Egypt, that too is of present interest for this Alexandrian was also the nephew of Philo. A reading of the first two chapters of Goodspeed's "Solomon" throws a flood of light upon the intensity of feeling and the depth of philosophic thought which moved the minds of men.

Into the welter of ideas Philo brought an unusual organization by his effort to combine the work of Plato with the highest of Judaic thought. It was only natural that Christian theology, just then formulating, should seize upon what was already prepared to hand, to express their own desires to bring the best of all systems into the circle of Christian thought. One noble monument to this effort is to be found, of course, in the Logos theology of the Prologue to the Gospel of St. John, and its provision for the doctrine of the Trinity. The same sentiment is found in the Fathers of the Church and in Origen who would ascribe sainthood to Plato. Aside from the body of his theology, Philo introduced what became important to Christian hermeneutics through the long centuries. This was the allegorical method of scriptural interpretation. The method was valuable in furthering the effort at universalizing the religion and philosophy of the age and giving it an apparent basis of authority.

Through the method, difficulties of fact were swept aside by the statement that they were only allegorical. Thus it was possible in the face of meaningless miracles, unbelievable traditions, to make contradictions sit down together. All scriptures became subject to both literal and allegorical interpretation. If the one presented difficulties, the other was a ready refuge down to the very time of the Puritan divines who found every scripture to have "four" different interpretations. This method of interpretation is still the frequent resort of the pestered theologian to the subversion of plain meanings. With Philo it made way for the embodiment within his own philosophy of many divergent systems.

The outgrowth of the method was the establishment of the doctrine of "authority," with a tendency to establish without controversy that only "the old is the good."

The work Professor Wolfson has undertaken is of great importance to a day when a new confluence of ideas appears in the foreground of history. Perhaps if we can discover the weaknesses as well as the strengths in the sources of what has for long seemed incontrovertibly authoritative, we shall listen with greater tolerance but with more critical judgment to the voices of the future. Here we have what may be truly described a disclosure of "the foundations of religious philosophy in Judaism, Christianity, and Islam."

R. T. F.

THE SHAKING OF THE FOUNDATIONS. By *Paul Tillich*. Charles Scribner's Sons, New York, 1948. Pp. xii-186. $2.50.

No expression of Christian insights can be quite the same to all men, but this volume is singularly successful in presenting the essential Christian faith to many men. The author avows a dual purpose in the Sunday meditations of which these expositions are the records. He would provide a medium of understanding for those who have difficulty with his more formidable theological presentations, and this by stress on "existential implications." He would speak in terms especially understandable by those earnest religious folk for whom "traditional" terminology would be a barrier to understanding.

Dr. Tillich takes a score of classic texts and passages from both Testaments, and renders them in concise, pithy, experiential terms. He speaks to the great religious universals in every man. The insights of technical psychology are evidently, but never obtrusively, at his command. The self-awareness of the reader, as quickened by his reading, takes the place of the so often "imported" illustrations.

Preachers will acclaim *The Shaking of the Foundations* as the words of a "preachers' preacher." Those desiring a handbook for devotional purposes will find these meditations searching and illuminating. To all who would renew their faith, amid today's shakings, this book is enthusiastically commended.

DONALD H. RHOADES

A COMMENTARY ON THE HOLY BIBLE. Edited by *J. R. Dummelow*. The Macmillan Company, New York, 1947. Pp. xliii-1,092. $4.50.

The *Commentary* first appeared in 1909 and has been reprinted many times since then. The reprinting of the present volume took place in 1947.

Any one-volume commentary is subject to real weaknesses, and this volume is no exception to the rule. One wishes he could be more complimentary, but this volume has more than its share of weaknesses. In the main it must be said that it is dogmatic rather than scholarly. Most of the Old Testament articles end with a reference to Jesus. The New Testament articles are, in general, harmonistic and dogmatic. There is no sense of introductory problems at all.

There are a few fairly good articles, but these suffer from brevity. Hosea seems to be rather well done. The section on history and literature between the Testaments is rather good and the article on "Personal Immortality" is worth while.

The names of some outstanding scholars appear as contributors, but what each has done cannot be determined inasmuch as there is no indication of who wrote a given article. This feature is one of the *Commentary's* most undesirable features.

A series of maps is included and placed in the back of the book. But these are blurred so as to be almost valueless. A diagram of Solomon's temple is fairly clear.

The value of reprinting this *Commentary* is more than questionable. It may gain a wide circulation but this, I fear, says something not only about the *Commentary* but also about the degree of scholarly awareness in the reading public, most of whom, I suppose, are ministers.

ERIC L. TITUS

CHRISTIAN PATHS TO SELF-ACCEPTANCE. By *Robert H. Bonthius.* Columbia University Press, New York, 1948. Pp. xi-254. $3.25.

This readable volume exploits the thesis that "psychology has demonstrated an effectiveness of method and a validity of principle from which representatives of religion and their people can greatly profit." (174) The new method of psychotherapy, in fact, indicates "that the customary religious approach is severely limited, and that the three Christian pathways could increase their effectiveness by consciously appropriating a number of its elements." (180) The three Christian "pathways" referred to are the "rejectionist" (Calvinism), the "forensic" (Roman Catholicism), and the "meliorist" (original Methodism, liberalism, religious humanism). The new psychological approach to personality problems has made a number of explicit contributions to religious thinking. It has shown that much "moral" evil is psychological rather than ethical. It has demonstrated "the crucial importance of self-acceptance for spiritual well-being." It has explicated the nature of self-acceptance. And it has provided a specific set of techniques, or a unique methodology, for spiritual and personal health, centering around "an awareness of the individual concerning the real factors in his own psychic structure" and the need of individual redirection in terms of his own ideals. In the first three chapters the author summarizes in a very useful way the three basic philosophies of life of traditional Christianity. In Chapter IV he shows the psychotherapeutic method in operation by offering a number of concrete cases. A final chapter indicates the merits and weaknesses of the three Christian approaches and the specific points at which psychology can be of service to them. This book is simply and lucidly written, and will be of value to clergymen and laymen alike, as well as to students of ethics.

W. L.

CHURCH UNION: WHY NOT? By *John R. Scotford.* Pilgrim Press, Boston, 1948. Pp. ix-123. $2.00.

If the American churches of today are not making a vital appeal to a large number of educated people, part of the reason may lie in the fact that the churches very reluctantly give up their institutional prerogatives, their tendency to worship the past, and their proneness to minister to the weak instead of challenging the strong. This little book on church union is well written and very timely as a tract for church-going people. While it will not prove very exciting to those who already are walking faster than the churches seem able to go in meeting the issues of the present century, this is no criticism of the book. The author states the whole matter quite clearly in his closing lines when he says the more fully church people come to an awareness of the needs of their fellow men, the more willingly they will unite their forces. Why should Christians criticize the failure of diplomats to achieve an effective United Nations when their own ecclesiastical leaders cannot achieve a united Protestantism in the United States of America? Dr. Scotford, editor of the official organ of Congregationalism, is urging the churches to move on a bit.

FLOYD H. ROSS

A CALL TO WHAT IS VITAL. By *Rufus M. Jones*. The Macmillan Company, New York, 1948. Pp. ix-143. $2.00.

This little volume, published posthumously, is the fruit of an urgent request by a prominent Quaker that its author write one more book "that will help the college-trained persons who have the scientific outlook to find their way back to a vital religion." (vi) With his usual deftness and power of inspiring, Dr. Jones fulfilled this task as one who was clearly conscious of the problem and approached it with sympathy for all sides. On the one hand, he recognized the "tragic" fact that religion is shrinking in importance "on the part of both professors and students in institutions of higher learning." Subjectively this means a retrenchment of personal life and awareness; objectively it threatens the quality of civilization, which cannot endure without adequate moral leadership and "a faith that transcends material and economic interests." (3) The religious consciousness stands on its own feet and refutes the contention that "scientific method" is the exclusive source of truth. Men live by faith, not by cognitive certainty, in respect to the central values and insights. Faith itself is "a leap of vision," oracular awareness, pre-perception for life and action. It is the volitional aspect of a total religious experience whose other pole is mystical awareness or God-consciousness. Nevertheless such religious life must be integrated with ideas, and particularly those ideas that are the product of scientific advance. Unfortunately the Church seems ineffectual for this task. It

> too often goes on talking about things which have no significance whatever for minds adjusted to the facts of the actual universe, but supplied with no imaginative material by which their minds can live serenely and joyously in the realm of creative faith. . . . It is one of the supreme functions of the Church to cultivate that imaginative dominion, and the medieval Church did it magnificently, but the Protestant Church has usually been too busy with doctrine and ritual to do this creative work, which is essential for adapting men's minds to the completely changed world outlook which science successively produced. (33, 34)

The challenge to the Church lies in the fact that "religious faith is not yet completely at home in this evolutionary epoch, and the strain is very apparent in circles in which science is a dominant influence." (35) It is obvious that an age of science needs instruction in mystical and religious fundamentals; but it is equally obvious that religious thought needs reorientation. This involves that reappraisal of Biblical literature that the Church in general has not yet accepted. Ptolemaic thought about Christianity must be abandoned, without the loss of traditional fundamental insights. This book will be found useful and illuminating for the student or the lay reader who seeks light in an age whose confusions inspire darkness.

W. L.

A GREATER GENERATION. By *Ernest M. Ligon.* The Macmillan Company, New York, 1948. Pp. xii-157. $2.50.

In this volume Dr. Ligon has described the methods and principles of character education developed in the Union College Character Research Project. The author is convinced that the laws of character development are as definite a part of the very nature of things as the laws of the physical universe. By empirical techniques he has sought to discover what those laws are. The first section of the book deals with the role of science in the problem of character, and the second portion deals with the role of religion.

Dr. Ligon observes that there are far more religionists who are unscientific than there are scientists who are irreligious. Thus in effect–and especially in the second half of the book–he directs his attention to the Christian parent or educator, urging him to become less platitudinous and more scientific in his attitude toward education. Psychologically, a man's religion consists of his evaluative attitudes. Personality changes would seem to be correlated with changes in one's evaluative attitudes; thus religious education must concern itself with changes of attitude in conformity with the laws of growth.

The Union College Character Research Project is consciously based upon a Christian hypothesis–namely, that character is developed in two major qualities, faith and love. Using the *Beatitudes* as a point of departure, Dr. Ligon describes four character traits of Christian faith which are aimed at overcoming fear, the basic factor in mental disease; and four traits having to do with Christian love, designed to overcome anger, hatred, suspicion, and selfishness. For those Christian groups that are interested in putting the Ligon hypothesis regarding character education to the test in their own church or community, this book should be a splendid introduction to the methods and principles.

F. H. R.

Intuition et Religion, Le Problème Existentialiste. By *Paul Ortegat.* Editions de L'Institut Supérieur de Philosophie, Louvain, 1947. Pp. 248.

There has not been a philosophy which has not invoked intuition in some manner, but the content given to the concept has varied greatly. Generally it is defined as an act of the spirit wherein subject and object coincide. This coincidence may result from an assimilation of the object by the subject thus being the theoretic intuition of essences which intellectualists attribute to the spirit, or it may result from a projection of the subject as is the case with teleological and existential intuitions. For thirty years the philosophers who held the latter position and challenged the theoretical evidences of speculative reason have been called intuitionists, although there has been a wide divergence among them according to the ends which they pursued. The modern form of intuitionism is quite different, being active rather than contemplative.

Existentialism today, however, has metaphysical ambitions and presents a theory of being which affirms the priority of existence over essence, intuition over mediation, and liberty over necessity. In the first part of the book under consideration the author presents the intuitionist theory with especial reference to the systems of Scheler and the existensionalist school. In the second part he gives his criticism, holding that while it has opened up new channels to religious philosophy, it seems quite incomplete in radically opposing the existential to the ideal. In the third part he has attempted to outline a religious metaphysics which is realistic, personalistic, and as intuitive as the existentialist philosophy while being, at the same time, more comprehensive, synthetic, and of ontological significance. This latter view is of course in harmony with the author's Catholic beliefs and reaches its highest point in the affirmation of God reached only through mystical intuition.

M. M. T.

POWERS OF THE SOUL. By *Ella Pomeroy*. Island Press, New York, 1948. Pp. vii-152. $2.00.

The author of these twelve chapters on the powers of the soul is well known in Unity and New Thought circles. The book will thus have its appeal primarily to those who feel at home in that particular idiom. The psychological and religious insights are those which can be drawn from a study of the religions of mankind without sectarian limitations. After discussing twelve powers of the soul under such chapter headings as "Faith," "Strength," "Wisdom," "Love," the author adds an outline for directed meditations upon them.

F. H. R.

JOHN HALES OF ETON. By *James Hinsdale Elson*. King's Crown Press, New York, 1948. Pp. 199. $2.50.

Through research and interpretation carried on at Columbia, Oxford, and elsewhere, Mr. Elson has rehabilitated a literary and ecclesiastical figure whose name enjoyed great fame in the century immediately following his death.

Born midway between Shakespeare and Milton, John Hales carried into the Stuart period some of the gay freshness and good fellowship of the Elizabethan era, mixed with an objectivity which could see so much value in various positions that like Erasmus before him he rose above partisanship. His life, from 1584 to 1656, included in early manhood residence and teaching of Greek at Oxford and work in the Bodleian Library in its formative stages. His last forty years saw him a Fellow at Eton, with only occasional sallies into more controversial centers. As chaplain to the British ambassador to the Hague he was present at the Synod of Dort, left an illuminating account of its deliberations, and, reacting from its harshness, "bid John Calvin goodnight." He rode the storm of the Puritan Revolution by remaining an Anglican clergyman yet taking a position which if generally accepted would have resolved the conflict without bloodshed.

Unable to advocate Romanism, Laudism, the logic of Ramus, or Puritan radicalism, he is revealed by his sermons, letters, and conduct as a Christian humanist of rationalistic, latitudinarian, and semi-deistic tendencies. He held that the state should sponsor a broadly tolerant church whose non-authoritarian yet efficacious organization should permit men of variant opinions to work together in harmony. To Hales the Bible was a guide to truth, but capable of such diverse interpretations that the individual had to be his own authority. Critical and scholarly examination was required in religion, man was inherently good, and also skeptical, and peace and charity were more important than discord and dogma. His conservative critics accused him of sympathy with Servetus, the Socinians, the Dutch Remonstrants, and other liberals. Small wonder that free souls like Isaak Walton, William Penn, and Matthew Tindal found much to admire in him.

Mr. Elson well relates Hales to his predecessors, contemporaries, and successors. His detailed study of certain intellectual trends over two centuries, while at times suggesting connections or borrowings which are hypothetical rather than proved, supplies a splendid review for student and teacher. Only the supremely erudite or habitually inflexible will fail to broaden their factual knowledge and interpretative powers by a perusal of this timely and carefully documented study.

EARL CRANSTON

Amour et Pureté. Essai Sur Une Morale De La Signification. Par *Roger du Teil.* Presses Universitaires de France, Paris, 1947. Pp. 249.

This unusual book is at once a challenge to contemporary moral equalitarianism, with its cult of mediocrity, and to the secular spirit that has forgotten its Plotinus and, indeed, the teachings of the New Testament. What it proposes is an ethics based upon the Christian doctrine that God is love and upon a Platonism that identifies the real and the good. The outcome is a challenging mixture of Cistercian mysticism, humanism, romanticism, and Protestant religiosity done, it appears, in the mode of Christian modernism. Logically enough, also, it adds a dash of Nietzschean supermanism, in addition to a bit of John Wesley and Thomas Law. Its Christian modernism is anti-Calvinist, anti-Lutheran, and anti-Buddhist. It affirms the radical freedom of man while accepting the orthodox doctrine that the initiative of grace comes from God as divine illumination. (207) The achievement of life can be measured along a continuum of ethical vision and fulfilment spreading between nullity, on the one hand, and divinity on the other. (125) This degree of achievement is identical with an attained state of love. Thus the use of the term *signification* in the subtitle, which here means significance or, in Freudian language, sublimation. An ethics of signification, in other words, is an objectivist ethics. The quality of love is determined by its wholeheartedness and the quality of its object. Supreme ethical achievement is saintliness, that is, the love of others more than ourselves, and of God above all. The selfless and universalized objectification of love may be consummated in many modes, for example, in moral reform, artistic creativity or religious adoration. An ethics of "signification" thus stands opposed to an equalitarianism that justifies mediocrity, pedestrian incompetence, egocentricity, and the pursuit of insignificance, whether this be comfort, pleasure, or timid detachment. Saintliness, the author warns, is not to be identified with its medieval ideal. Its "purity" is not bodiless; it is rather a scope and quality of meaning or content or significance achieved in, and by means of, the body. Purity means selflessness, sincere love and objectivity, the self-giving of the will and of the energies, in the love of what is good; in brief, it is an approximation of the mind of God. (192) In giving itself it is not afraid of martyrdom: this is the weakness, incidentally, of Platonism. This Wesleyan perfectionism, however, is tainted with a quality of antinomianism and social indifference that the founder of Methodism abhorred. A quality of romanticism here substitutes the appeal of divine emotion for a ruthless law that the will is to obey. Thus the author justifies Goethe's intrigues ("love") with Charlotte Buff and Frederica Brion because they inspired *Werther*, while similarly Wagner's "magnificent love" for Mathilde Wesendonck and his stealing of Frau Cosima from Hans von Bülow was justified by their inspiring of *Tristan* and *Siegfried*. This philosophy of genius beyond law, unfortunately, is precisely the philosophy by which Hitler justified the rape of Poland and Czechoslovakia. We cannot deny the claim of the author that society acts against the interests of humanity by failing to nourish its exceptional men from whom, alone, the spiritual values of humanity are derived. Nevertheless, it is anti-American, at least, to accept the formula that "If the normal individual is for the service of society, society is for the service of the supernormal man, who is himself immediately for the service of God." (232) At the same time this book puts its finger on a fundamental weakness of contemporary culture and, consequently, upon a fundamental weakness of our subjectivistic and relativistic ethics. Unfortunately it is very badly proofread. In one quotation from William James there are six errors. (136)

W. L.

GEORG WILHELM FRIEDRICH HEGEL: EARLY THEOLOGICAL WRITINGS. Tr. by *T. M. Knox*. Intro. and Fragments tr. by *Richard Kroner*. University of Chicago Press, Chicago, 1948. Pp. xi-340. $5.00.

Beginning with Dilthey's studies on the early history of Hegel, in 1906, it has become increasingly evident that the system of absolute idealism springs from profoundly religious experiences and interests. New proof of this fact that Hegel was primarily concerned with a reconciliation of Greek and Christian values was offered in 1907 when Herman Nohl published for the first time a series of early Hegel manuscripts under the title of *Hegels theologische Jugendschriften*. The translation of Nohl's collection, now provided to English readers, omits only a series of unimportant fragments and adds an address "On Classical Studies" delivered in 1809 when Hegel was rector of the Gymnasium at Nüremberg. From the original edition are included *The Positivity of the Christian Religion* (1795, Part III somewhat later), *The Spirit of Christianity* (1798-9), a short fragment on *Love* (c. 1797), and the extant fragment of *A System* (1800) of which only two sheets out of an original forty-seven have survived. The two writings on Christianity are modernistic and condemn authoritarianism and legalistic bondage. *The Positivity* interprets Jesus as a teacher of Kantian ethics who "undertook to raise religion and virtue to morality and to restore to morality the freedom which is its essence." (69) While Protestantism is superior to Judaism and Roman Catholicism in this respect, pietistic emotionalism is condemned as engendering a self-deception and "a false tranquillity which sets a high value on these feelings manufactured in a spiritual hothouse." It also encourages men to sink "into helplessness, anxiety, and self-distrust, a psychical state which often develops into madness." (140f.) With Kant, Hegel repudiates intellectualistic theology and comes to the defense of a practical or pragmatic viewpoint. What the age needs, he writes, is not to rejoin the logic of the Enlightenment but to derive "that now discarded theology from what we know as a need of human nature and . . . thus exhibit its naturalness and inevitability." (172) A rather astonishing contempt of intellectualism is expressed in the following statement:

> Understanding and reason may claim to sit in judgment on everything; they readily pretend that everything should be intellectual and rational. . . . The most ingenious actions, the most innocent feelings, and the most beautiful imaginative pictures all experience this harsh treatment. But its effect accords with its inappropriateness. Intellectualistic people believe that their words are true when they address feeling, imagination, and religious needs in intellectualistic terms; they cannot conceive why their truth is resisted, why they preach to deaf ears. Their mistake is to offer stones to the child who asks for bread. Their wages are useful if it is a matter of building a house. But anyone who claimed that bread was fit for housebuilding would also be properly contradicted. (171)

Pauline pessimism receives this forceful criticism:

> If nothing whatever in our own hearts responded to an external challenge to virtue and religion, if there were no strings in our own nature from which this challenge resounded, then Jesus' endeavor to inspire men to virtue and a better religion would have had the same character and the same outcome as St. Anthony of Padua's zeal in preaching to fish. (175)

Interestingly enough this essay anticipates the Wagnerian demand for national, political imagery which, it is claimed, Judaism cannot supply. It also anticipates Nietzsche's psychological analysis of Hebraic "slavemindedness" and Christian pessimism and his demand for a union of virtue and the spirit of Greek sturdiness:

> Men thus corrupt, men who must have despised themselves from the moral point of view, even though in other respects they prided themselves on being God's favorites, were bound to create the doctrine of the corruption of human nature and adopt it gladly. For one thing, it corresponds with experience; for another, it satisfied their pride by exculpating them and giving them in the very sense of calamity a reason for pride; it brought disgrace into honor, since it sanctified and perpetuated every incapacity by turning into a sin any possible belief in human potentialities. (159f.)

The main problem of a philosophic approach to religion is that of "showing religion's appropriateness to nature through all nature's modifications from one century to another." (173)

The Spirit of Christianity, interestingly, repudiates Kantian religion in favor of a Christ-religion of love. While "the Jews had no share in anything eternal," (195) the religion of Jesus captures the Greek ethics on a higher level. Man replaces Hebraic cultism, virtue is substituted for legalism. (224) Love "is the complement of the virtues. By it all one-sidedness, all exclusiveness, all restricted virtues, are annulled." (246) While Kant is right in claiming that a thought cannot be loved, while love cannot be commanded, he misses the point that love is higher than law.

This volume will be of value not only to students of Hegel but also to those interested in the philosophy of religion. The lengthy introduction by Professor Kroner also serves as a useful survey of Hegel's intellectual biography.

W. L.

IN THE WORLD OF LITERATURE AND ART

ESSAYS ON SHAKESPEARE AND OTHER ELIZABETHANS. By *Tucker Brooke*. Yale University Press, New Haven, 1948. Pp. xi-220. $2.75.

After the death of the late Sterling Professor of English at Yale it was found that various published articles and reviews from his pen had never been collected, and that a few such articles remained in manuscript. These materials are now brought together in a volume. All concerned with the Elizabethan period, they manifest again the ripeness of Brooke's scholarship and the charm of his style. Several of the pieces are hardly more than notes for specialists. The majority adapt themselves to a wider audience and, as a preface states, illustrate "the true function of the scholar in relation to the community at large."

Two are devoted to analyses of Marlowe and Spenser which may be thought a bit enthusiastic but are certainly illuminating. "Shakespeare Apart" shows the master as a "little Englander" whose "attitude toward state and sovereign was not Tudor but Plantagenet; not Renaissance but feudal." "Hamlet's Third Soliloquy" appraises this utterance, along with the seventh, as exceeding the others in intellectual range and, since it terminates in a "moment of clear vision" for the prince, as giving us "the surest key to Hamlet's mental difficulty." "The Romantic Iago" interprets Iago as "a man of warm sympathetic qualities" who has surprising likenesses to Falstaff. "King Lear on the Stage" attributes the theatrical failure to the tragedy's presentation, "under the tattered veil of mythical royalty," of the "bourgeois" and "least erected vices," those of domestic selfishness.

Of interest at this university, though dating from 1924, is the passage on Joseph Quincy Adams'

> contention, here rendered very probable, that Shakespeare served his dramatic novitiate, not with the company of Lord Strange, as has been supposed, but with that of Lord Pembroke. The fact that this . . . conclusion has been independently arrived at by Mr. Crompton Rhodes and by Professor A. Gaw is a rather remarkable confirmation of its inherent reasonableness. (109-110)

GARLAND GREEVER

DOCTOR FAUSTUS: THE LIFE OF THE GERMAN COMPOSER ADRIAN LEVERKÜHN AS TOLD BY A FRIEND. By *Thomas Mann.* Tr. by *H. T. Lowe-Porter.* Alfred A. Knopf, New York, 1948. Pp. vi-510. $3.50.

It was inevitable after the frightful moral debacle of Germanism had reached its depths and freedom of expression in some measure restored, that those Germans who were filled with shame at the action of their countrymen, should become vocal. We are hearing now from those who did not wait for the defeat of Hitlerism in order to declare themselves. Thomas Mann is one such courageous spirit who has not hesitated early and late to turn the power of a great literary genius to account in the rebuke of his erring countrymen.

Dr. Faustus is an effort to account for the strange psychology by which the German nation was induced to rush down the steep places into the sea of ignominy and destruction. The impasse into which the right-thinking and intellectual German found himself thrust is thus expressed:

> . . . how I shudder at this "one way or the other," both for myself and for the awful impasse into which fate has crowded the German soul! For I have in mind only one of the two alternatives: only with this one do I reckon, counting upon it against my conscience as a German citizen. The never-ending public instruction has impressed on us in all its horrors the crushing consequences of a German defeat; we cannot help fearing it more than anything else in the world. And yet there is something else—some of us fear it at moments which seem to us criminal, but others quite frankly and steadily—something we fear more than German defeat, and that is German victory. (30)

Through the experiences of Adrian Leverkühn are disclosed the mental and spiritual diseases which have afflicted the German mind. The moralism and humanism which came to hold sway lacked any insight into the demonic character of human life, its eventual dependence on the intuitional and spiritual. Even now upon the German mind the importance of freedom is, in Mann's estimation, only beginning to dawn. Victory had been worked out to a mathematical nicety and was certain. There was no idea that a war which Germany started should find its theater at last in Germany. There was even less belief in the spiritual power that strengthens the arms of free men. And so the author declares the war is lost, and more

> . . . *we* are lost: our character, our cause, our hope, our history. . . . For liars and lickspittles mixed us a poison draught and took away our senses. We drank—for we Germans perennially yearn for intoxication. (175)

One of the most interesting passages is that which describes Leverkühn's conversation with the Devil, an interview assisted by the lively background of revived German tradition and superstition expressed also in its music. (231 con.) In this he is told that an untruth that enhances power can hold its own against any ineffectively virtuous truth. (242) When he inquires about "life in the Dragon's Den," where what is done is so vile that it cannot be made public, he is advised of the "security of Hell" which this provides, and so:

> . . ."*here everything leaves off*." Every compassion, every grace, every sparing, every last trace of consideration for the incredulous, imploring objection "that you verily cannot do so unto a soul": it is done, it happens, and indeed without being called to any reckoning in words; in soundless cellar, far down beneath God's hearing, and happens to all eternity. (245)

The naive egoism of the German took for granted that his own "development" was of such importance that the rest of the world must shed its blood, and thus he claimed that he was forced into war, the arrival of "a great hour, a sacred necessity." (300-1) As a result the judgment that now hangs over us, the author declares, is that which fell on Sodom and Gomorrah.

All this might seem better forgotten were it not true that the dangers still hang over us. Events still working in Germany indicate that the condition described by Mann as once present still persists. He speaks of it as "certain strata of bourgeois democracy seemed and seem today ripe for what I termed the dictatorship of the scum: willing to make common with it to linger out their privileges." (340) Nor is there foundation for hopes of peace in and concerning Germany until Germans of this better mind, shocked and repentant, can achieve political expression in Germany itself.

Let us not in sweet content and self-righteousness imagine that all is well. The author asserts the importance of Georges Sorel's *Reflections on Violence*, as a formative force in German thinking. But this book became the *Bible*, or at least a part of "the inspired scriptures," of Leninism. It is grounded in the Nietzschean, Darwinian assumption that social progress can come only through merciless war. Nor is this doctrine peculiar to German and Russian; it is the Devil's broth that has become too much the diet of the whole world, and is apparent in the multiplied activities of human society everywhere. The time is ripe for us to end our compact with Satan, and to substitute therefor the love of God.

It is highly important that every lover of world order should read this book which so brilliantly details the psychoses that afflict our own age. Readers will not find easy reading, and second and third readings will yield valuable returns. It is a great book by a great and courageous author, and deserves the prizes recently accorded.

R. T. F.

FOUR THOUSAND YEARS OF CHINA'S ART. By *Dagny Carter*. Ronald Press Company, New York, 1948. Pp. xix-358. $7.50.

Those who read or possessed themselves of Dagny Carter's *China Magnificent*, published in 1935 and now out of print, will be eager to acquire this beautiful book. For while it contains that which appeared in the former volume, it has been thoroughly rewritten and rearranged with chapters increased from sixteen to twenty-six, additional illustrations, and the added results of the discoveries and researches of a dozen years.

Western obsession with its own art, its classical periods and particularly of Greek sculpture, has made it oblivious of what must be admitted to have been an unsurpassed art of the Orient. First European impressions of China came at a time when its golden age had passed. While much of its artisan skill still remained to educe the term magnificent, the Western world, with true provincialism, esteeming its own art as the high water mark of achievement was prepared to be astonished at the lesser values of Ming and Manchu. The Western observer was prepared for surprise at almost any manifestation of superiority in the East even though he had long been regaled with what seemed to him the extravagant tales of travelers such as Marco Polo. As a matter of fact, the field of Chinese art was so vast, covering four millenniums, and so lacking in organized knowledge, that it is left to our own times to gather a new appreciation. The organization of information into chronological order and the interpretation of the evolution of Chinese art has been largely the work of the present generation. It is not too much to say that the work of Mrs. Carter and in particular this book, will take an outstanding place in the development of Western appreciation of Chinese art.

It is arranged so as to form an ideal text for the study of Oriental art. The beautiful format and printing of the book by the Ronald Press adds greatly to the pleasure of ownership.

R. T. F.

CHANCE AND SYMBOL: A STUDY IN AESTHETIC AND ETHICAL CONSISTENCY. By *Richard Hertz*. University of Chicago Press, Chicago, 1948. Pp. viii-198. $3.00.

Less abject than Thomas Mann and more critical of the world outside of Germany, Richard Hertz in *Chance and Symbol* raises searching questions concerning the present state of the world. He dwells on the fact that our "scientific progress" with its foundation in Darwinian Materialism and analysis has finally ended in a world conceived as the result of chance and without explanation. Man is, for these pundits, quoting Justice Holmes, the cosmic ganglion, at the crossing streams of energy, which can frame a syllogism or wag its tail. This, he claims, is a philosophy out of which "a Hitler is the 'logical' outcome of . . . a logic that bites its tail in a tautological fit." (108) Thus he turns his attention not only upon Germany, but upon the dominant maxims, ambitions and disbeliefs of what with euphemism we call "Western Culture." Our pretended good was displaced by the Germans with a pretenseless evil, rejecting German history.

His description of his own generation of Germans is enlightening:

> Take a German of the generation born around 1900: in the first World War he was made to believe, by the scientifically organized German army, that the Allies were cannibals, which was unscientific; after that he joined the Communists and was made to believe, by the scientifically organized Communist party, that the capitalists were cannibals, which was again unscientific; after that, he joined the Nazis and was made to believe, again by a most efficient and scientific party organization, that Jews and Communists were cannibals, again unscientific; now he is made to believe that the Nazis are cannibals, an assumption for which outward evidence exists but which in this context is again unscientific. The point is not whether something is true or not but that, once "all ideas have been discredited, all Utopias have vanished," nothing remains but structures of power which have to be fed by slogans; and it is not their scientific truth that counts but their effectiveness in persuading people to act "as if" they were true and to provide the political machines with the necessary momentum. . . . Such are the inconsistencies with which the valueless but scientific world of the machine age tries to build the New Jerusalem. (127-128)

He interprets the lack of the age as a lack of moral and spiritual ideas: "Europe, instead of putting on the sackcloth of atonement, is thus tailoring herself a new Nessus shirt of unsympathetic thinking." (18) There cannot be coherence without form, a secret or inner pattern of some kind, "What is called a catastrophe of democratic ideology is, in reality, really a catastrophe of Value." (104) Science has given us a meaningless world which must dissolve under the domination of the Law of Entropy, but into the inertia of this Law "steps a power wielding strange, quantitatively unexplainable spells," and we are face to face again with the problem of value as reality. The inorganic serves under the invisible hand of the Dreamer, the coming of the organic but not only so, the

> . . . meaningless routine might have gone on forever if at last the Dreamer had not been empowered not only to dream his activity but also, in the consciousness of man, to conceive the idea of his activity. (138)

The faculty of perceiving meaning

> . . . is dependent on the existence in the universe of an objective quality hidden in the "nature of things," say, a spiritual field which, to a

> certain extent, contradicts and overrules the response mechanism which is in force in physical nature. (139) . . . In other words, the creature was "enabled" to give the revolving wheel of Ixion to which it was bound a meaning; by this act it could transcend the problem of immediate self-preservation and so break the narrow bounds of animal instincts; and, by thus "being enabled," man enabled the Dreamer to conceive the idea of his activity. But the Dreamer existed before man. (140)

Thus to a science that leads straight into the ethics "that the most cruel war is the most humane, because it is the shortest" (153) he proposes a salvation through self-transcendence. (165)

> Is it not eternally true that here on our planet the chance-spiral of noncorrelated matter has run headlong into a field of conscious matter, where, as Eddington put it cautiously, "correlation may occur"? And is it not grotesque that science denies to this truly extraordinary occurrence the only proper adjective "miraculous" or "magical" or, better, "divine," because, as yet, no picture of an old gentleman with a long flowing white beard labeled "God" has been found under a microscope or in an atom? (185)

Having arrived at this climactic point in which the meaning of man and of the universe as well, is discoverable in the permission to be like God (truly good personalism), our author seems to throw away all he has gained by a remark inconsistent with his main thesis by dropping into the fallacy of the abstract: "Our hope is not man but Process." (186) An abstraction like "Process," no more than an Absolute, can be "The Dreamer" of prior pages.

Our attention was first called to Dr. Hertz by a previous remarkable book, *Man on a Rock*, but this is even more rewarding to the careful reader. He has a captivating style, a surprising command of English and is certain to be better known in the future.

There is one statement (86) to which we must take exception, as it seems to stand. He seems to say that Du Noüy popularized, along with S. Alexander (two opposites if there ever were any) the ideas of Emergent Evolution. This may, in some measure, have been true of Alexander, but Du Noüy, on the contrary, attacked it declaring: "The theory of Emergence is not a working hypothesis. It is not even scientific."*

R. T. F.

THE NATIONS IN THE MEDIAEVAL UNIVERSITIES. By *Pearl Kibre.* Mediaeval Academy of America, Cambridge, 1948. Pp. xi-240. $5.00.

Society carries its history with it like a snail with its shell on its back. We may deplore history; we may decide to live in the present; but if we are to understand the present, we must have a mind to this burden of tradition which that present embodies.

**L'Homme Devant la Science*, Flammarion, Paris, 1939, p. 176. English Translation, *The Road to Reason*, Longmans, New York, 1948, p. 152.

In general it may be asserted with safety that the modern college undergraduate does not know the origin of his very terminology, such as the Liberal Arts which gives its name to what was once the leading division of his university. Little does he care also about the meaning of the term "University" and its differentiation from the College. He wonders why in certain countries the faculty (at one time) rules and in others seem to stand in awe of the students who provide the sources for political revolution. He is completely stymied by the terms *trivium* and *quadrivium*, and probably has never heard how Boethius gathered the massed learning of a passing age into a single book that later provided the curriculum for the rising universities and saved Europe from general benightedness.

To those who still maintain any curiosity about such things, this well-documented and authoritative account by Dr. Kibre of Hunter College offers the needed information in brief form, though it cannot, of course, take the place of such copious works as that of Rashdall and others.

The author dwells principally on the organization of the universities as one by one they came into being. Of very great value is the accompanying Bibliography, carefully ordered and showing the present-day sources of information. Thus it will prove a valuable handbook both for students and for librarians.

R. T. F.

THE CYPRUS PASSION CYCLE. By *August C. Mahr.* University of Notre Dame Press, Notre Dame, 1948. Pp. xvi-225. $4.50.

This is a scholarly study meant for specialists in late Byzantine literature and philology but which will also be of interest to students of the history of European drama. The basis for the work is a manuscript which is enclosed in the *Codex Palatinus Graecus* in the Vatican Library, and which is obviously the scenario of a "cyclic" Passion Play written by Konstantinas Euteles Anagnostes, an orthodox monk who was Chief Notary of Cyprus under a king of the Lusignan dynasty, at the time when the Byzantine Emperors, expelled from Constantinople by the Latin knights of the Fourth Crusade, resided in Nicaea (from 1214 to 1261). The text of this "scenario," as Professor Mahr names it quite properly, was first published by S. Lambros in 1916, then by A. Vogt in 1931, in *Etudes sur le Théâtre Byzantin* (Byzantian VI).

Professor Mahr gives a series of well-ordered arguments, philological as well as historical, in order to prove that the scenario was composed in Cyprus and that, in all probability, Konstantinas Euteles was its real author (although the possibility that he might have found this text in a Cypriot monastery is not dismissed). He (Professor Mahr) notes incidentally that the ecclesiastic province of Cyprus was permanently independent of the Patriarch of Constantinople after the late fifth century, and that its monasteries, like many others in the Empire, hung to their icons and remnants of dramatic activity all through the Iconoclastic era.

This Passion Play is called *cyclic* (it begins with the Awakening of Lazarus set on the Saturday before Palm Sunday and ends on the Sunday after

Easter with Christ's "Injunction to the Disciples"), because the awakening from the dead marks the beginning and the end of the action, the main theme being Christ's Victory over Death. Professor Mahr states that the Cyprus Passion Play is the first and only cyclical play in the history of the drama, although it is based on continuous Byzantine tradition and dramatic technique (itself linked to the antique Greek mime plays), with no vestige of Western influence (as a forerunner of this tradition Professor Mahr mentions the Passion narrative of Romanos Melodos, written about A.D. 500, where the Awakening of Lazarus, Palm Sunday, and the Resurrection are already linked in a "cyclical" way).

The whole text of the scenario (dialogue and stage directions with mention of necessary props) is given at the end of Professor Mahr's book, with a parallel English translation, literal but elegant.

An interesting sidelight on the Eastern traditions linked with Passion narratives and Passion Plays, is the presence (in the Cyprus Passion Play) of the Gypsy blacksmith (the *comodromos*, itinerant metal worker, or *chalceus*) who first nails the body of Christ on the Cross, and then pulls the nails off to help in taking the body down. Professor Mahr finds the Gypsy blacksmith playing the same role in the folklore of Galicia, Bulgaria, Little Russia, Lusatia (Wendic), Bessarabia, and Greece (Lesbos).

MATILA GHYKA

BROWNING'S ESSAY ON CHATTERTON. Edited by *Donald Smalley*. Harvard University Press, Cambridge, 1948. Pp. xi-194. $3.50.

An inexhaustible source of material for investigators of nineteenth-century English literature exists in the files of the monthly and quarterly periodicals of that era. Most of the principal authors wrote for them, and the contributions seldom carried any identification. A notable instance of such treasure-trove has been published by Professor Smalley under the title *Browning's Essay on Chatterton.*

At first sight, as the text of the essay occupies less than 30 pages of a 200-page volume, the observer is apt to suspect that it has been made the excuse for an inflated critical apparatus and a display of erudition. The inference would be unjust, for Professor Smalley's discussion justifies every page that it occupies.

The story of how he identified the essay is in itself an interesting demonstration of competent research methods. Next we discover that this "Essay on Chatterton" was not published originally under any such title, but as a review of a monograph on Torquato Tasso. In those days, when most of the literary periodicals were "Reviews," every contribution had to deal ostensibly with some newly issued book. John Forster, on becoming editor of the *Foreign Quarterly Review* in 1842, asked his friends to contribute to his first number. The nominal scope of the magazine required that the critiques should deal with foreign literature; and it is typical of Browning's unpredictable behavior that he chose this occasion to depart from his usual interest in Italian history, and digressed from his supposed subject after a few paragraphs, in order to devote the rest of the article to the life and character of the English poet Chatterton.

The bulk of the introduction and notes, however, is concerned with the significance of this essay in relation to Browning's other works. Except for his *Essay on Shelley*, Browning has not been known to have written prose, and therefore his critical theories have had to be inferred from his poetic practice. Here we now have him expressing positive opinions on the personality of another English poet. The parallels with his Shelley essay are notable, but less so than the parallels with several of his principal poems.

In short, the essay throws invaluable light upon the mental process which underlay Browning's composition of his dramatic monologues. A few recent critics have cast doubt on the accepted view that in his monologues Browning was a scientifically minded psychologist and a dispassionate analyzer of history. In view of his belief in intuition, it is not surprising that he depended on this sort of direct insight (or what an unfriendly critic might term sheer prejudice) in forming his interpretation of a character.

Thus, to support his vigorously partisan defense of Chatterton, he coolly selected such evidence as suited his preconception and discarded other details —sometimes Chatterton's own statements—on the ground that he (Browning) understood the true situation better than the people participating in it. Professor Smalley shows how this piece of sincere but unscrupulous "history faking" explains Browning's long series of poems about impostors and other men of sullied reputation. It also has important repercussions upon *The Ring and the Book*, in which Browning similarly claimed the right of interpreting historical documents by his higher intuition. Perhaps most fascinating of all is Professor Smalley's analysis of Browning's play *The Return of the Druses* which uses a plot identical with his version of the Chatterton story.

LIONEL STEVENSON

WESTERN CIVILIZATION

CHAPTERS IN WESTERN CIVILIZATION. Edited by the *Contemporary Civilization Staff of Columbia College*. Columbia University Press, New York, 1948. Vol. I, pp. viii-437; Vol. II, pp. 299. $5.00.

An excellent introduction to the history of modern civilization is this work, issuing from the distinguished Columbia staff on Contemporary Civilization. The chapters are written by Clagett, Barnes, Clough, Cole, Garrett, Nagel, Golob, Clark, Frankel, O'Connell, and Bowen. Herein is discussed the medieval heritage; the consolidation of national states; the beginnings of capitalism; the "natural" man of the Renaissance; the Reformation; the development of modern science; mercantilism; political institutions of the seventeenth century; the Enlightenment and the French Revolution. The second volume takes off with the close of the French Revolution with articles by Randall, Artz, E. A. J. Johnson, Barnes, Shanahan, Hofstader, Golob, Frankel, Cole, and MacIver on the Romantic realist; counterrevolution and reaction; the industrialization of society; economic liberalism and nationalism; the impact of

Darwinism; the extension of democratic practice; social viewpoints since 1850 and Europe between World Wars. An examination of such chapters as that on the "Impact of Darwinism," for instance, shows, in a spot most likely to be weak in contemporary exposition, a carefully restrained, up-to-date and forward-looking consideration of modern scientific problems without resort to dogmatism.

The two volumes are beautifully printed, yet easily handled, and equally creditable to the Columbia staff and the University Press.

R. T. F.

THE SPIRIT OF REVOLUTION IN 1789. By *Cornwell B. Rogers*. Princeton University Press, Princeton, 1949. Pp. ix-363. $5.00.

Bringing deep insight into the background and moving forces of the French Revolution is Cornwell Rogers' *The Spirit of Revolution in 1789*. The Revolution was an emotional as well as a historic event and was closely related to the wave of introspection and humanism that swept over Europe and was manifested at one extreme in the *Confessions of Rousseau* and in the other by the Wesleyan movement in England. The common man was coming to a hitherto unknown self-expression and in such cases charged with emotional *élan* resorted to song. The author, with a very original idea, traces the events of the crucial year, 1789, through the popular songs of the street. In this way, as in no other, he displays the ideas on which the Revolution was based in the minds of the people. The early popular respect for Louis XVI amounted to little less than deification, which a wiser monarch would have used for his own benefit but for which Louis was unprepared. It indicated the desire of the masses to follow leadership. As event by event Louis betrayed their hopes, they fastened on one or another to lead them to full liberty. Now it was Bailly, now Necker, now Lafayette, until finally they arrived in the clutches of Napoleonic dictatorship.

This story of a single year is amazingly interesting and brings us to the fountain sources of events. The Bibliography and appended notes of nearly a hundred pages will constitute this book a "must have" for all serious-minded students of the French Revolution. Particular interest is added through the present turn in world events which provide such striking parallels of history. The book is well written and beautifully printed.

R. T. F.

THE COMING OF THE FRENCH REVOLUTION. By *Georges Lefebvre*. Tr. by *R. R. Palmer*. Princeton University Press, Princeton. Pp. xx-233. $3.00.

Among the "burned books" of our contemporary outbreak of savagery was Lefebvre's *The Coming of the French Revolution*. It was ordered destroyed by the Vichy government presumably lest the French people again become conscious of their lost liberty. In perhaps no other place in the world can we find the love of independence so deeply ingrained among all classes and particularly with the common people as in France. It is this sturdy integrity that has saved France again and again in the tide of war and has saved her from the domestic, as well as the foreign, dictator. For one then who would get an insight into the political history of France, this work of Professor-Emeritus Lefebvre at the Sorbonne will prove of special interest and value. It is the story of the events of a single year, 1789, but in it are clearly disclosed the springs of that revolution with which the American Revolution had such close relationship. It is ably translated in this edition by R. R. Palmer who writes an illuminating preface for it.

R. T. F.

FATHER KNICKERBOCKER REBELS: NEW YORK CITY DURING THE REVOLUTION. By *Thomas Jefferson Wertenbaker*. Charles Scribner's Sons, New York, 1948. Pp. xv-308. $4.50.

In our school histories we have seen the American Revolution from a single viewpoint, that of the revolutionists. The recent acquisition of important documents such as the *Sir Henry Clinton Papers*, the *Gage Papers*, the *Minutes of the Associated Loyalists* by the Clemens Library at the University of Michigan, and the *Guy Carleton Papers* in the library of Colonial Williamsburg has now afforded a new outlook from the standpoint of the Loyalists. From these sources, as well as from others, Thomas Jefferson Wertenbaker has gathered an interesting account and a new viewpoint of the Revolution. Generally overlooked by our histories is the fact that New York City served as the British capital throughout the war, and even throughout the period of agitation from 1765 to 1783. Here resided the Governor General, the head of the defending forces, and here came for protection refugee royalists from every part of the colonies. Here was the chief naval base, and hence were issued the orders. Most of us who are descended from the old stock have ancestors who faced each other from opposite lines and the divisions within New York were tragic and bitter.

For the Loyalists, however, there was a double portion of bitterness. Representing wealth, social prestige, as well as loyalty to Britain, they were generally despised and disparaged by their military masters so that their efforts to assist their own cause were limited and made futile.

When the British moved out in careless unconcern for the "colonials" who had been loyal, these suffered not only the loss of property and prestige but they gained the approbium of the victorious rebels. Even their deportation to the provinces by the British was characterized by a callous disregard. The inner story of this side of the Revolution balances the picture heretofore held and has significance in illuminating the traditions of our most cosmopolitan city (and some think, the most provincial) which with the United Nations Headquarters makes it the capital of the controversies of the world.

R. T. F.

THE FAMILY: ITS FUNCTION AND DESTINY. Editor, *Ruth Nanda Anshen*. Harper and Brothers, New York, 1949. Pp. xi-443.

The purpose of the book as stated by the author is "to point out that the family is intrinsic to human life and society; that it is an institution founded on the laws of nature; and that it is an association supporting and supported by every civilization." The book appears as the fifth in what is known as the Science of Culture Series. This series attempts "to synthesize fundamental contemporary ideas which, by their dispersion, have been rendered comparatively ineffectual."

The first section of the volume deals with portrayals of the family as it functions in various countries of the world, such as China, India, Moslem lands, Russia, Latin-American countries, and among Negroes (chiefly in the United States). These chapters are contributed by persons who may be considered authorities in the given fields. In the first chapter the editor discusses "the family in transition." The editor defines a well-functioning family, somewhat loosely, as "a union of bodies, souls, hearts, and minds in a single collectivity." In considering *genus Americanum* of the family, Ruth Benedict insists that the changes occurring in the family in the United States "do not mean that it is decaying and needs to be saved," for it offers a great variety of privileges. The privileges that the family gives are not, however, always paralleled "with an awakening responsibility"—herein lies the problem of the American family.

Following the first section on the patterns of family life in the world is a second one on the structure of the book. Thirteen essays by a total of fourteen authors comprise this part of the book. For example, Talcott Parsons writes on "The Social Structure of the Family," R. K. Merton on "Social Structure and Anomy," Max Horkheimer on "Authoritarianism and the Family," De Rougement on "The Crisis of the Modern Couple." The editor contributes the last chapter of the section and of the book on "The Conservation of Family Values" and concludes by saying that when man believes in "a universe of law, of reason, of love" and sees the infinite and the finite, eternity and current life mirrored in the family as "the primal and the universal image of order, of peace, and of salvation," then will the family come into its own.

It is difficult to evaluate this book except in a general way, because it contains so many different facts and analyses by so many interpreters of the family. The book gives a hopeful outlook regarding the intrinsic potentialities of the family. It defines many of the possibilities of the family that people generally do not realize. It is a treatise of description and theory which makes a positive contribution to the already large and growing literature on one of the basic institutions of human society.

EMORY S. BOGARDUS

THE STEEP PLACES. By *Norman Angell.* Harper & Brothers, New York, 1947. Pp. 247. $3.00.

As a setting for his appraisal of present world conditions, the author lists and discusses four events "any one of which taken by itself would be as portentous and overwhelming as anything in history," and which have occurred simultaneously. These events are: (1) the advent of atomic weapons in war; (2) the dissolution of the British Empire; (3) the rise of power of the Russian Empire; and (4) the arrival of the United States as a world power. The author believes that these four events are related.

In his introductory discussion of "the human factor" in the present world scene, Mr. Angell italicizes the words in the following paragraph to emphasize his thinking. It may be noted that, although written long before the discussions for the North Atlantic Security Alliance got under way, his words seem to be quite in line with the philosophy of that agreement:

> There are few truths at this moment more vital, more indispensable to the prevention of a third world war with all its atomic horrors than this: *a greater unity of the non-Russian world is not the alternative to an effective United Nations and the inclusion of Russia therein. It is the indispensable condition of UN success and the inclusion of Russia.* And this remains true even if, as a stage toward world order, Russia for a time ceases to be a United Nations member.

Since Mr. Angell's book turns so much on his discussion of Russia and the western world, one additional quotation giving his description of the Soviet Union may be in order:

> The USSR is much more than a very great military state—beyond any question in many important respects the greatest in the world today. It has also become the headquarters of this new faith, as Rome became the headquarters of the Christian faith. The new gospel has devotees as sincere and self-sacrificing as the early Christian martyrs who perished in the Roman persecutions; and leaders as ready as was Torquemada to rack and torture on behalf of the true doctrine.

In his Chapter Five "Educated Defiance of Fact" the author repeats one of his well-known convictions, namely, that there are plenty of educated men who know the facts and know what ought to be done but, nevertheless, they do nothing.

"Is it possible," asks Mr. Angell, "to apply to the field of politics and social science generally the method of interpreting fact which we have applied so successfully to matter?" He examines the successes of the scientists in physics and chemistry, and at least holds out hope for better results from social scientists than have been achieved to date.

Writing of "The A-Bomb in an Urban World" the author points out the precarious position of countries like Britain where

> The whole apparatus of daily life in the island—railroads, power stations, water reservoirs, factories, sewage systems—could be wiped out in forty-eight hours after an atomic Pearl Harbor, especially if the attack were leveled, not from a base thousands of miles away, but from a base only a few hundred. Britain as a people, a greater European state, a power, would be wiped out; finished. *Kaput.*

But there are other forms of weapons and military power that must be reckoned with. In the course of his discussion of power the author asserts that the Russians use power "to repress heretical objections to the true doctrine, to forbid political oppositions, even in its satellite states." On the other hand, the Western nations use power "to ensure the right of political opposition, the right of access to the facts upon which governments base their policy, the right to discuss those facts and to oppose conclusions drawn by government." Some agreement on the use of facts and "the reciprocal freedoms of information, movement, inspection" is necessary as a first step towards understanding and adjustment.

In his conclusion, as he summarizes "the ultimate issue," the author affirms that "Russia's power lies where Hitler's lay: in the disunity of those who would like to oppose her but cannot agree upon the method and policy of so doing."

Calling for a reshaping of education in the Western democratic world to the end that the "facts" shall be used to shape policy, Mr. Angell believes that "we"—especially the English-speaking peoples—hold within our hands the material means of preserving those freedoms we fought two wars in this generation to defend." Philosophers and political scientists alike will be interested in one of the closing paragraphs of this significant book:

> It is a grim coincidence that the discovery of means of almost universal destruction should synchronize with a determinist philosophy, popular and fashionable, which insists that the individual, his ideas, his moral behavior are the product of external circumstances he can do nothing to control. In so far as men are guided by such fatalism it undermines their sense of responsibility to get at truth and to see that it guides policy. It undermines the very basis of democracy, which is that the opinion of the individual is all-important and the foundation of government. It is no accident that Marxist communism is associated with dictatorship.

Sir Norman Angell has given us a thoughtful and significant book. His thesis calling for unity amongst the democracies is timely. His constructive-mindedness with regard to the future of the United Nations and the ultimate sound judgment of the peoples of the world, especially his emphasis on the worth and the dignity of the individual, is an encouraging beacon light in these days of adjustment, crises, and search for the best pathways.

J. EUGENE HARLEY

THE BOOK ABROAD

Psychanalyse et Connaissance. Par *Georges Dubal.* Les Editions du Mont-Blanc, Genève, Suisse, 1947. Pp. 146.

This unpretentious volume is another of those intended to deal in a nontechnical but scholarly way with several of the basic philosophical and psychological problems of modern thought. The material is presented in three essays covering respectively: psychoanalysis, including the evolution of psychotherapies; the problem of instinct; and the problem of knowledge.

The great individual, family, and social problems are but the projection, the externalized expression of those which rend the interior nature of man and which increase their force in proportion as his intelligence develops. Out of this developing intelligence comes the Superego which at first is considered an intruder, then is pushed into the unconscious where it struggles with the primitive *Id* giving rise to powerful but vaguely understood neuroses. Thus psychoanalysis has had its genesis in bringing to the surface these unconscious, struggling forces for the purpose of resolving the conflicts. It is, however, but one in a long history of psychotherapies, the latest and most penetrating for assisting man in finding a more satisfactory adjustment to his world. The second essay examines critically the theories of instincts arriving at the view that the activity which lies at the base of the instinct as well as of the intelligence can be explained in terms of simple and conditioned reflexes, not hereditary but individual. Finally the author discusses the problem of knowledge and finds its solution in a spiritual monism. He quotes Piaget approvingly:

> If the reduction of the mental to the physiological, and of the biological to the physico-chemical, can hold up and maintain its realistic character, the logical consequence to this movement is to reduce physics to mathematics and mathematics to psychology thus arriving at idealism. (144)

M. M. T.

THE PSYCHOLOGY OF IMAGINATION. By *Jean-Paul Sartre*. Philosophical Library, New York, 1948. Pp. 285. $3.75.

Unfortunately the publisher neither names the translator nor indicates the French source or sources of which this English edition is the translation. Before World War II, and after completing his studies in Germany, and this means before he had developed his theory of existentialism into its definitive form, Jean-Paul Sartre published two works entitled *L'Imagination* (1936) and *L'Imaginaire* (1938). This volume is probably chiefly a translation of these two works which appeared a little before *La Nausée*, Sartre's first existentialist novel. At the time he was writing these essays on the nature of imagination and the imaginary he was largely under the influence of the "intentional psychology" of Brentano. Hence the volume under review is more phenomenological in its teaching than existentialist.

This means that it is highly technical and difficult to comprehend. Indeed, it is not for the general reader but for the specialist who has considerable knowledge of psychology, logic, epistemology, and metaphysics. There are four main parts: I. The Certain; II. The Probable; III. The Role of the Image in Mental Life; and IV. The Imaginary Life. There is also a short conclusion and an index.

This book is especially valuable for students interested in understanding something of the intellectual development of Sartre. It contains an important exposition of Leroy's theory of hypnagogic images (see pp. 52-61), and an extensive exposition and discussion of A. Flach's work entitled *Ueber symbolische Schemata in produktiven Denkprozess* (see pp. 139-155), in which he indicates the relations between Flach's investigations and the experiments of

Binet and Mesmer. This discussion shows the influence of the Würzburg school of psychologists on Sartre's thinking.

D. S. R.

Philosophie de l'Etre. Par *Louis de Raeymaeker.* Editions de L'Institut Superieur de Philosophie, Louvain, 1947. Pp. 431.

This is the second edition of the monumental work of Dr. De Raeymaeker, one of the most outstanding authorities on philosophical subjects at the justly famous Belgian University of Louvain. It is one of a series of volumes dedicated to the study of philosophical, moral, social, and religious problems. The four other contributions to this series are *La Philosophie de Martin Heidegger* by Alphonse De Waelhens, *L'Epistémologie Thomiste* by Georges Van Riet, this being mostly a research on the problem of knowledge according to the contemporary Thomistic school, Jacques Leclercq's *The Main Outlines of Moral Philosophy*, and finally Jules Pirlot who writes on *The Teaching of Metaphysics.*

In his book Dr. Raeymaeker offers a general outline of Special Metaphysics explaining that man has an inborn tendency to study this subject, and he gives the reasons for it; then he divides the whole work into three sections, themselves again divided into numerous chapters, and closing with a conclusion.

Although primarily written for the specialist, the style of the book is in such clear and limpid French that it cannot fail to attract the layman who will find in its pages a keen and penetrating analysis of many factors that constitute the everyday experience of a thinking and exploring mind.

The author is definitely influenced by the great religious thinkers all the way from Origen and Gregory of Nyssa, down to Augustine and Thomas Aquinas. He gives an imposing array of quotations from the ancients to the moderns, from Plato and Aristotle, through Plautus, the philosopher, and Plotinus to Spinoza and Bergson. It is certainly a volume that merits a wider and deeper treatment in all its aspects and phases. Particularly interesting are the conclusions of the author wherein he shows himself definitely opposed to the static values of abstract ideas and he recognizes the need of closer study of conditions as they really exist.

A. Th. P.

L'Ontologie de Sartre. By *Gilbert Varet.* Presses Universitaires de France, Paris, 1948. Pp. 196. 300 fr.

Contemporary existentialism, like the philosophy of Bergson, is an attempt to escape from the absurdities of a narrow intellectualism of the Spinozistic and Humean tradition. Freed from its egotism, its ethical grotesqueness and its pornography, it is a forceful protest against a false ethical optimism and a false conceptualization of life and selfhood that pervades the modern spirit. Like Bergson it supports a movement as old as Descartes that seeks the adequate formulation of a philosophy of freedom. In this movement Sartre holds an ambiguous and widely misunderstood place which can only be accurately appraised by a serious examination of his lengthy volume *L'Etre et le Néant* (*Being and Nothing*). For this reason, Professor Varet's study, devoted to that work, is useful and important. *L'Etre et le Néant* is a subtle, dialectical work whose chief inspiration is the phenomenological system of Husserl, and shows more influence of this source than that of the German existentialists. (He agrees, for instance, that "Consciousness is not primitively reflective, but *intentional.*" (88)) Nevertheless, it is an original investigation that "is by no means that of Heidegger or that of Husserl, still less that of Jaspers." Indeed, "it surpasses in value (*utilité*) all translations of Heidegger, Husserl or Jaspers in the complete originality of its own solutions." (1) Sartre's problem is that of advancing beyond the phenomenological circle of "intentional consciousness," the static realm of ideas, to empirical actuality. It is this realm of the actual, the beyond-ideas, to which he gives the name of the "ontological," as distinguished from the "metaphysical" which refers to an alleged realm beyond all consciousness or experience—a realm that Sartre does not recognize. The quest for *Dasein*, the actual, dramatic, historical, creative and free, the individual and concrete, leads back to the Cartesian problem of the "I" and in this quest the point of departure is Husserl's phenomenological method together with his application of Locke's doctrine of reflection. According to Sartre, Husserl is hopelessly trapped within his own circle of conceptual or phenomenological method, and in a lengthy and subtle dialectical argument attempts to prove that Husserl can never arrive, as he claimed, at the ontological actuality of the "marvelous being-for-itself of the *Ego*." For from the intellectualistic approach of phenomenology, nothing but objects can be found. Like the Midas touch, everything is transformed by that method, a method in which phenomenology is inextricably enclosed. As demonstrated by Kant's critical method, the dramatic actuality never appears at all; in its place is a mere set of ideas *about* the actual. That is, while we seek a subject-fact, an actuality, we cannot get out of the circle of object-ideas. When Husserl, like Kant, gets through with his intellectualistic analysis of actuality, the dramatic, vital, dynamic, and historical have become a set of dead and static inventories. The attempt to capture the ontological actuality intellectually by such propositions as "I am I" or "I am a synthetical unity of apperception" or "I am person," then, is a hopeless failure. Actuality slips through the fingers of intellectualism. Intellectually handled, even "nothing" becomes a kind of something, an object of thought or of intentional consciousness (object-consciousness). In other words, actuality is, from the phenomenological standpoint, a mere nothing, a total emptiness, since it is not an object at all. This problem, of course, simply revives that of the Platonists who distinguished between Being and Nonbeing, but were unable to solve the problem of concrete individuality and actuality. This Nonbeing which Plato admitted his method could not handle, is, for considerable modern thought, the veriest being (Berkeley's "notion" of soul, the post-Kantian metaphysics of "Will.") The actual or ontological must be found by an act of reflection but when found, it is not an object capable of conceptual treatment. It is not, when found, a *Cogito*, a

"Me," or a person. It is simply "existence-in-being," pure "existence," "pure itselfness," pure historicity, "*Réalité-humaine*," the "*Pour soi*," the conceptually "*Néant*." It is the sheer denotable, the Taoist "unnamable." It is then, not susceptible to treatment by noetic "optics"; it is not "photogenic"; it is not amenable to description. (Its approximation to James's *that* of radical empiricism is obvious.) Varet observes that Sartre's doctrine turns phenomenology into phenomenalism or, perhaps better, into "phenomenism." The outcome, as the writer remarks, is "Neither the other world—nor Nature without man—no mere man caught in the world—but simply a world become human by its relation to man." It thus rejoins Hume, but with a radical correction of Hume's ethical complacency and his attempt to identify actuality and sensation. It is, we might say, Hume turned inside out and given a third dimension.

W. L.

Books Received

NEW ENGLAND TRANSCENDENTALISM AND ST. LOUIS HEGELIANISM. By *Henry A. Pochmann.* Carl Schurz Memorial Foundation, Philadelphia, 1948. Pp. 144.

RABINDRANATH TAGORE: POET AND DRAMATIST. By *Edward Thompson.* Oxford University Press, London, 1948. Pp. xii-330. $4.50.

THE CRISIS OF THE HUMAN PERSON. By *J. B. Coates.* Longmans, Green & Co., New York, 1949. Pp. 256. 12/6 net.

FLORENTINE ART UNDER FIRE. By *Frederick Hartt.* Princeton University Press, Princeton, 1949. Pp. ix-148. $5.00.

La Philosophie de l'Esprit. Par *Léon Brunschvicg.* Presses Universitaires de France, Paris, 1949. Pp. 183. 300 fr.

ART AND SCIENTIFIC THOUGHT. By *Martin Johnson.* Columbia University Press, New York, 1949. Pp. 200. $3.00.

PALESTINE DILEMMA, ARAB RIGHTS VERSUS ZIONIST ASPIRATIONS. By *Frank C. Sakran.* Public Affairs Press, Washington, 1948. Pp. vii-230. $3.25.

ENDLESS HORIZONS. By *Vannevar Bush.* Public Affairs Press, Washington, 1946. Pp. viii-182. $2.50.

THE IDEOLOGICAL CONTENT OF SOVIET LITERATURE. By *A. M. Egolin.* Public Affairs Press, Washington, 1948. Pp. 24. $1.00.

THE PATTERN OF SOVIET DEMOCRACY. By *G. F. Aleksandrov.* Public Affairs Press, Washington, 1948. Pp. 35. $1.00.

SOVIET INTERPRETATION OF CONTEMPORARY AMERICAN LITERATURE. By *M. Mendelson.* Public Affairs Press, Washington, 1948. Pp. 30. $1.00.

MYSTIC REBELS, APOLLONIUS TYANEUS, JAN VAN LEYDEN, SABBATAI ZEVI, CAGLIOSTRO. By *Harry C. Schnur.* Beechhurst Press, New York, 1949. Pp. 316. $3.50.

THE MATHEMATICAL ANALYSIS OF LOGIC. By *George Boole.* Philosophical Library, New York, 1948. Pp. 82. $3.75.

THE PHILOSOPHY OF EXISTENCE. By *Gabriel Marcel.* Philosophical Library, New York, 1949. Pp. 96. $2.75.

Realidad Inteligible y Realidad Pura. Par *Pedro Sondereguer.* Editorial Utria, Buenos Aires, 1948. Pp. 110.

THE LIFE OF RALPH WALDO EMERSON. By *Ralph L. Rusk.* Charles Scribner's Sons, New York, 1949. Pp. ix-592. $6.00.

THE DE PRIMO PRINCIPIO OF JOHN DUNS SCOTUS. By *Evan Roche.* Franciscan Institute, St. Bonaventure, 1949. Pp. xvii-153.

ENCYCLOPEDIA OF CRIMINOLOGY. Ed. by *Vernon C. Branham* and *Samuel B. Kutash.* Philosophical Library, New York, 1949. Pp. xxxvii-527. $12.00.

Man as Man, The Science and Art of Ethics. By *Thomas J. Higgins*. Bruce Publishing Co., Milwaukee, 1949. Pp. xii-607. $3.75.

Origen's Concept of Penance. By *Ernest F. Latko*. Université Laval, Quebec, 1949. Pp. xxvii-178. $2.25.

Alfred Tennyson. By *Charles Tennyson*. The Macmillan Company, New York, 1949. Pp. 579. $7.50.

A Lexicon of St. Thomas Aquinas. Fascicle I A-C. By *Roy J. Deferrari, M. I. Barry* and *I. McGuiness*. Catholic University Press, Washington, 1948. Pp. 262. $12.50.

The State and the Citizen. By *J. D. Mabbott. H. J. Paton*, Ed. Hutchinson's University Library, London, 1949. Pp. 180. 7/6.

An Introduction to Aesthetics. By *E. F. Carrett*. Hutchinson's University Library, London, 1949. Pp. v-151. 7/6.

New Frontiers of Psychology. By *Nicholas de Vore*. Philosophical Library, New York, 1949. Pp. vi-143. $3.00.

Poems. By *Camp Fire Girls*. Camp Fire Girls, Inc., New York, 1948. Pp. 32. .50

Introduction to Zen Buddhism. By *Daisetz Teitaro Suzuki*. Philosophical Library, New York, 1949. Pp. 136. $3.75.

Goethe's Autobiography, Poetry and Truth from My Own Life. Tr. by *R. O. Moon*. Public Affairs Press, Washington, 1949. Pp. 700. $5.00.

The Testament of Werther in Poetry and Drama. By *Stuart Pratt Atkins*. Harvard University Press, Cambridge, 1949. Pp. xii-322. $4.50.

Milton's Samson and the Christian Tradition. By *F. Michael Krouse*. Princeton University Press, Princeton, 1949. Pp. viii-157. $3.75.

Biblical Criticism and Heresy in Milton. By *George Newton Conklin*. Columbia University Press, New York, 1949. Pp. x-137. $2.50.

Protestant Churches and Industrial America. By *Henry F. May*. Harper & Brothers, New York, 1949. Pp. x-297. $3.50.

Mysticism in Religion. By *W. R. Inge*. Hutchinson's University Library, London. Pp. 168. 12/6.

The Moral Law *or* Kant's Groundwork of the Metaphysic of Morals. By *H. J. Paton*. Hutchinson's University Library, London, 1948. Pp. 151. 15/.

Being and Some Philosophers. By *Etienne Gilson*. Pontifical Institute of Mediaeval Studies, Toronto, 1949. Pp. xi-219. $3.50.

How Came Our Faith. By *W. A. L. Elmslie*. Charles Scribner's Sons, New York, 1949. Pp. xii-417. $3.25.

Recovery of Man. By *F. R. Barry*. Charles Scribner's Sons, New York, 1949. Pp. viii-109. $2.00.

Crisis in Education. By *Bernard Iddings Bell*. McGraw-Hill Book Co., New York, 1949. Pp. ix-237. $3.00.

THE PILGRIMAGE OF WESTERN MAN. By *Stringfellow Barr.* Harcourt, Brace and Company, New York, 1949. Pp. xiii-369. $4.00.

THE ETERNAL FOUNTAIN. By *Robert Ernst Dickhoff.* Bruce Humphries, Boston, 1949. Pp. 128. $2.50.

Traité du Caractère. By *Emmanuel Mounier.* Editions du Seiul, Paris, 1947. Pp. 789.

THE RISE OF REALISM, AMERICAN LITERATURE FROM 1860-1900. Rev. Ed. By *Louis Wann.* The Macmillan Company, New York, 1949. Pp. xv-874. $3.25.

AQUINAS, SELECTED POLITICAL WRITINGS. *A. P. D'Entrèves,* Ed. Basil Blackwell, Oxford, 1948. Pp. xxxvi-199. $2.25.

Sufrimiento, Victoria y Eternidad. By *Manuel Nuñez Regueiro.* Libreria "El Ateneo" Editorial, Buenos Aires, 1949. Pp. 258.

SYMBOLIZATION AND FICTIONAL REFERENCE. By *Hans Regnell.* C. W. K. Gleerup, Lund, 1949. Pp. 223. 9:50 kr.

Fiktionerna I Det Estetiska Livet. By *Rolf Ekman.* C. W. K. Gleerup, Lund, 1949. Pp. 392. 15:00 kr.

A HISTORY OF PHILOSOPHICAL IDEAS IN AMERICA. By *W. H. Werkmeister.* Ronald Press Company, New York, 1949. Pp. xvi-599. $5.00.

Skrifter Utgivna Av Kungl. Humanistiska Vetenskafssamfundet. Band 37. Almquist & Wiksells Boktryckeri, Uppsala. Pp. xlv-304. 32 kr.

THE ROOTS OF AMERICAN CULTURE, AMERICAN LITERATURE TO 1830. *Robert E. Spiller* and *Harold Blodgett,* Eds. The Macmillan Company, New York, 1949. Pp. xv-998. $3.50.

CHRIST. By *Maximilian Beyer.* Philosophical Library, New York, 1949. Pp. ix-284. $5.00.

Expiration de l'Homme. Par *Mihai Ralea.* Presses Universitaires de France, Paris, 1949. Pp. 299. 400 fr.

POWER AND MORALS. By *Martin J. Hillenbrand.* Columbia University Press, New York, 1949. Pp. xi-217. $3.25.

REFLECTIONS ON OUR AGE. UNESCO Lectures at Sorbonne University. Introduction by *David Hardman.* Columbia University Press, New York, 1949. Pp. 347. $4.50.

INTRODUCTION TO COMPARATIVE MYSTICISM. By *Jacques De Marquette.* Philosophical Library, New York, 1949. Pp. 229.

THE CYCLE OF THE SEASONS. By *Donald Earl Edwards.* American Weave Press, Cleveland, 1949. Pp. 29.

THE NEUROSIS OF MAN. By *Trigant Burrow.* Harcourt, Brace and Company, New York, 1949. Pp. xxvi-428. $7.50.

Deutsche Dichter, 1700-1900. Von *Emil Ermatinger.* Verlag Huber & Co., Aktiengesellschaft, Fraueneeld, 1949.